

HOSPITAL CASE MANAGEMENT™

the monthly update on hospital-based care planning and critical paths

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CMs should take the lead as JCAHO patient flow standards go into effect

Hospitals must assess, manage throughput issues

The new patient flow standards from the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) create opportunities for case managers to take the lead in their hospital's compliance and adherence initiatives, says **Hussein A. Tahan**, SNSc, RN, CNA.

The standards call for the hospital leadership staff to have a process in place for managing patient flow and throughput, especially in the emergency department (ED) and post-anesthesia care units. The standards require hospitals to engage in an on-going evaluation of patient flow and to implement strategies for process improvement, with the main focus on patient access to care efficiently, effectively, and in a timely manner, he adds.

"If an organization doesn't have case managers in the areas critical for throughput, they are going to be at risk for complying with the standard," adds Tahan, director of nursing for cardiovascular services and care coordination at Columbia University Medical Center, New York-Presbyterian Hospital in New York City, and chair of the Commission for Case Manager Certification.

The new standards, which went into effect Jan. 1, call on hospital leadership "to develop and implement plans to identify and mitigate impediments to efficient patient flow throughout the hospital."

The new standards mean that patients must receive access to care as soon as they are in the system and that there is no delay in admission to a bed or in receiving care or testing, Tahan points out.

Case managers can facilitate timely patient throughput by making sure patients in the ED are triaged in a timely manner, depending on their condition, by expediting delivery of care by coordinating tasks and procedures, as well as making sure the results of tests are available to physicians so they can make decisions about the plan of care and by evaluating the

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patient's health insurance plans, or lack thereof, he adds. "The case managers should not be just checking on the appropriateness of admission; rather they should also make sure the patient receives the care they need in a timely manner, while they are in the emergency department awaiting admission

as they are in an inpatient bed," Tahan says.

Inefficient patient flow can affect patient safety and quality of care, as well as affecting the hospital's bottom line by increasing denials and avoidable days, points out **Teresa C. Fugate**, RN, BBA, CPHQ, CCM, manager at Pershing Yoakley & Associates, a Knoxville, TN-based health care consulting firm.

"Many hospitals are not managing throughput appropriately from the time the patient is admitted through discharge. As a business, hospitals should be looking at efficiency and economy of service and how it impacts everything that happens with the patient," she says.

For instance, if a physician orders an X-ray in the morning and it's not completed until late afternoon, it results in an eight-hour delay in the physicians seeing the report and making changes in the patient treatment. "Delays in service can adversely affect getting the patient well enough to discharge and opening up the bed to another patient," adds Fugate.

The JCAHO standards call for hospital leadership to identify all processes critical to patient flow and monitor them from the time the patient arrives through admission, assessment, treatment, and discharge, she says. Fugate suggests hospitals create a multidisciplinary committee that starts with the top DRGs and follows patients through the system, identifying what is critical to the flow of patients being admitted and treated in an appropriate manner, and discovering the main issues that result in an extended length of stay.

She recommends starting with just one DRG and working from there because "it's easier to understand what's happening with 175 patients a year as opposed to looking at every single patient." However, you still need to monitor all patients. "If you can drill down to critical pieces of patient care by taking one or two DRGs and whittling down to the root cause of delays with these diagnoses, it may direct you to your overall problem," Fugate adds.

A hospitalwide multidisciplinary patient flow committee allows the hospital leadership team to understand the issues of patient volume, demand for inpatient beds, bed capacity and supply, and necessary resources, Tahan notes.

"Decisions can then be made more carefully about which product lines or programs need to be expanded and which need to be contracted. Case managers are ideal in sharing their day-to-day experiences and observations while such decisions are being made. They definitely can contribute to strategic decisions," he adds.

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Delays may be caused by hospital operations issues, Fugate says. For instance, a patient comes in on Friday with chest pains, but the cardiac catheterization unit isn't open until Monday, so the patient stays in the hospital over the weekend.

Pharmacy issues are another big problem in most hospitals, she adds. "In the majority of hospitals, it typically takes two to three hours to get medications that were ordered for a patient upon admission. Some of these medications should be on the floor, ready to give to patients immediately so we can move the patient from the acute phase."

For instance, patients who are admitted with congestive heart failure should receive Lasix intravenously upon admission.

As the number of uninsured patients using the ED for primary care increases, there is an increased need for patient care management in the ED and an opportunity for case managers to make an impact in the way their hospital admits patients and plans for their discharge, Tahan points out. The JCAHO standards state that the ED is particularly vulnerable to experiencing the negative effects of inefficiency, he adds.

The problem is exacerbated when there isn't a case manager in the ED to assess patients when they come in, Fugate adds. "We've said for years that discharge planning begins with admission, but in all reality, it's usually 24 hours later."

For instance, if there isn't a case manager in the ED to begin the discharge planning process and the patient is admitted in the evening, it's likely he or she won't be seen by a case manager until 10 a.m. the next day.

If the patient is on observation status, the discharge planner has to scramble to make sure the patient's discharge planning needs are met, she points out. Case managers in the ED can make sure the hospital isn't admitting patients who could be treated on an outpatient basis and see a physician the next day and can work with physicians to avoid "social admissions," patients who are admitted for no other reason than the family can't manage their care at home. "Case managers should be aware the physicians are worried about risk issues and may place patients in the hospital for that reason," Fugate says.

If there's not a case manager in the ED, Fugate advocates training the ED nurses to assess patients for post-discharge needs at the same time they are treating patients. "Case managers should work with attending physicians to make sure they understand the importance of avoiding overutilization of resources and increasing the patient stay."

8 Steps to Better Patient Flow

1. Maintain appropriate admissions.
2. Align bed supply and demand.
3. Manage short-stay patients.
4. Reduce avoidable admissions and social admissions.
5. Monitor and prevent avoidable delays in care.
6. Facilitate early patient discharges.
7. Accelerate post-acute transfers.
8. Involve physician advisory groups in improvement projects.

Source: Pershing Yoakley & Associates, Knoxville, TN.

She tells of one patient who was admitted on observation status for chest pain. The patient had known for a long time she had to have stents for peripheral vascular blockages. While she was on observation status, her physician had a surgeon look at her and then perform the surgery. Because the patient was on observation status, she couldn't have an outpatient procedure. In this case, the patient had surgery and spent time in the hospital for what could have been an outpatient procedure.

"The hospital gets paid only on the original reason for admission. The coding is based on the first diagnosis," Fugate points out.

Case managers should make sure that they complete appropriate discharge planning for patients to help them avoid being readmitted. For instance, they should make sure that patients can afford any medication they will be taking after discharge and that they understand what they need to do at home. Plan your discharges ahead of time, she adds.

If a patient is likely to be transferred to a lower level of care, talk with family members early in the stay and suggest they decide on a nursing home. "Don't wait until the physician signs the discharge orders to talk to the family," Fugate says.

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Throughput department reaps dramatic rewards

Software system tracks patient beds in real time

At one time, the emergency department (ED) at Seton Medical Center in Austin, TX, sometimes had to hold patients overnight because there wasn't a bed available, and local physicians complained that they could not get patients admitted when they needed to.

To improve patient flow, the hospital staff divided into several teams, focusing on four key areas: ED diversion, post-anesthesia care unit (PACU) holding, patient access to the facility, and in-house and out-of-house transfers. Ultimately, these teams merged to form the patient throughput department.

"We saw a need to facilitate patient flow, particularly when the census was high," says **Patricia Ramming**, RN, throughput manager. "Since the creation of the department, the bed turnaround has improved, and we've made huge strides toward rapid intervention and initiation of care."

She further states that the goal of the department is to smooth and prioritize patient care and flow. In addition to creating the new department in the spring of 2004, a number of other initiatives, including a computerized bed-tracking system, have had a dramatic impact on patient flow.

Consider these achievements:

Before the initiative was begun, the average holding time in the PACU was 120 minutes per patient. In the last three months of 2004, the average total hold time per month was just 180 minutes for all patients.

In 2003, the hospital had to divert patients brought by emergency medical services a total of 458.24 hours because there were no beds. In 2004, the time dropped to 49.57 hours.

In December 2003, the average patient stayed in the ED for 296.26 minutes before admission. In November 2004, the time had dropped to 190.22 minutes.

The patient throughput department operates 24 hours a day, seven days a week with a full-time equivalent staff of 17. "Our department looks solely at patient throughput from all avenues, whether direct admissions, admissions from the surgical center, the emergency department, or from another hospital," Ramming says.

Department staff include house supervisors, express admissions nurses, and nonclinical bed board staff.

1. House supervisors:

The house supervisor's job is to facilitate patient flow and place the patients who need to be admitted based on critical needs and available beds. They are RNs who cover the hospital 24 hours a day, seven days a week and give approval for accepting patients into the system. The house supervisors all have critical care experience and are part of the hospital's critical response team.

"We adjusted the shift time of the house supervisor so they can make rounds on the units before the on-coming shifts arrive. That way, if an issue comes up, the house supervisors are there and accessible," Ramming says.

2. Bed board staff:

The bed board department is the central hub for bed placement. All requests for bed placement come into the department, and all bed assignments come out of the department. The hospital established one number where physicians and/or hospital transferring patients can call for admissions.

Nonclinical staff take admissions information and bed requests and enter them into the computerized bed-tracking system.

The unit receiving the patient will be notified automatically by the system. If the sending hospital need an accepting physician, staff refer them to the physician on-call for the needed specialty. If a clinical aspect is needed, the nonclinical staff will contact the house supervisor for assistance.

3. Express admissions nurses:

The express admissions team was created in response to a time study that showed it took an average of 180 minutes for the nurse on the floor to admit the patient.

"That's too long to initiate care. We created the express admission team to step in to provide rapid treatment," Ramming says.

The express admissions nurse floats through the hospital and helps whenever needed. For instance, if the bed board staff see that the telemetry floor has five admits, they ask the express admissions nurse to go up and help.

The express admission team gets the paperwork started, conducts a history and physical, initiates any stat orders and tests, draws blood, places an IV, and addresses any home medication issues.

Team members work Monday through Friday from 9 a.m. to 11 p.m. and Saturday and Sunday from noon until 1 a.m.

The hospital uses bed-tracking software, which gives the house supervisor access to the status of every bed in the hospital.

The system is updated when a patient leaves, when housekeeping begins cleaning the room, and when a room is clean and available for another patient.

The hospital made the environmental services department a part of the patient care team. Using the computer, the throughput office can track turnaround times on the bed and set priorities for which room should be cleaned first.

"The computer system allows us to prioritize where the housekeeping staff should clean for better patient flow. The system helps the housekeeping department monitor what is going on, and because there is limited access to the system, they're no longer being pulled in 20 different directions," Ramming says.

Any unit that admits patients can enter information into the computer requesting a bed. These include the ED, surgery, imaging, and the cardiac catheterization lab.

Charge nurses key in information about patient transfers and discharges. The request goes to the throughput department.

"At first, the charge nurses were hesitant about giving up control of the beds, but now they have expressed satisfaction with the new system because it allows them to be back on floors taking care of patients instead of being tied up on telephone calls," Ramming says.

A daily bed briefing, a short meeting, is held every morning and attended by charge nurses from every floor, managers and directors of every department, housekeeping, plant operations, case management, central supply, human resources, and biomedical.

The team discusses bed and staffing issues and addresses any issues that maintenance needs to attack that day.

They tabulate the available beds and how many people are expected to be admitted. The house supervisor takes those data and runs the plan for the rest of the day.

For instance, if the intensive care unit (ICU) is at capacity and the staff know that surgical patients will need to be in the ICU, the ICU team facilitates moving patients out.

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Team approach improves hospital's patient flow

Case managers are an integral part

Danbury (CT) Hospital takes a team approach to facilitating patient flow, with a series of initiatives coordinated by a multidisciplinary Discharge Admissions Review Team (DART) that meets regularly to assess what's working and what needs improvement to get patients in and out of the hospital safely.

Case managers are an integral part of the patient flow initiatives, starting in the emergency department (ED) and continuing throughout the patient stay to make sure that patients receive the care and procedures necessary to keep their length of stay as short as possible.

"One of the most important things we do is provide a link between the nurses, the doctors, and all other people who touch the patient. The patient is at the center, and we are the links," says **Doris Imperati**, RN, BSN, MHSA, CCM, director of clinical resource management.

The case management department has helped coordinate several projects designed to facilitate patient flow, including developing discharge materials in multiple languages and creating a chart sticker that reminds physicians and the nursing staff of what they need to do to ensure the patient is ready for discharge.

Direct admissions go through the mobile admissions coordinator, or MAC nurse, who facilitates the admission process for patients and physicians.

"The MAC nurse works for the nursing department but has several years of case management experience and therefore has a good understanding of what has to happen for timely, safe patient throughput," Imperati says.

DART, headed by the chief of the medical department, includes an administrator, physicians, department heads, the MAC nurse, and representatives from case management and performance improvement.

DART meets regularly to review what is and isn't working to get patients safely in and out of the hospital. For instance, it uncovered a problem with the hospital's transcription service, which wasn't completing the discharge summary transcription on time. Since most skilled nursing facilities won't accept a patient without a discharge summary, patients were staying longer than necessary.

The team identified a transcription company that turns around the transcriptions within two hours, speeding up the discharge process.

The committee examined the time of discharge and made sure the hospital staffing was centered around the peak discharge times.

The staff work to have patients discharged by 10 a.m. or 11 a.m. but also try to discharge patients later in the day if they are ready to go home.

“As the DART committee worked to improve the process, we realized it is more important that the discharge is planned and everybody knows the plan than for the discharge to happen by 11 a.m.,” Imperati says.

The team examined factors that could cause delays in discharge. For instance, most surgeons are in surgery during the early part of the day and don’t make rounds until late afternoon. Many attending physicians don’t visit their patient in the hospital until their office hours are over. When they want a test before discharge or don’t look at the results until late in the afternoon, it can delay discharge until the next day.

Every day in the late afternoon, the case managers touch base with the physicians, either by making rounds with them or telephoning them to identify patients who are likely to be discharged the next day.

The case manager puts an “A” priority next to the patient’s room number if the patient is likely to be discharged or enters “A” priority on the unit’s assignment board. This alerts the staff nurses to discuss the potential discharge with patients that evening, asking them if they have transportation for the next day and suggesting they call their family if needed.

Tests and procedures that must be completed before the patient can be discharged also are tagged as “Priority-Discharge.” This means that if the patient has a laboratory test or other procedure scheduled, it is done early and the results are returned quickly.

“Case management plays a pivotal role. It’s up to them to find out what is happening with each patient and to make sure that the nurses, the transporter, the skilled nursing facility, or anyone else who needs to know is aware that the patient is being discharged,” Imperati says.

The challenge is making sure the patient is ready for discharge when the family arrives, she adds. “We don’t want the family having to sit around and wait for us. The case manager coordinates with the doctor and clinical staff so that everything is ready when the family arrives.”

The case managers devised a 3x5 peel-and-stick label that goes on the front of the chart, reminding the physician that the patient is going to be discharged and providing a checklist of what may be needed for discharge. “This not only helps the surgeon who might get out of surgery at 6 p.m. when the case manager is gone, but it helps any person who touches the patient know what we need to make the discharge smooth,” Imperati says.

As the patients approach discharge, they are educated about their conditions to prevent readmission. “It’s a team effort between the nurses, the physicians, the case managers, and other health care team members. Our goal is to educate the patient and the family to take better care of themselves when they are back in the community. We want to reduce the number of patients coming back to the emergency room when their problems could have been avoided if the patient had been educated,” says **Elizabeth Adler**, BSN, MHA, clinical quality manager.

The staff wrote educational booklets for patients on the medical-surgical unit and some obstetrical patients, using terms that patients could understand, telling them what to expect throughout the hospital stay, what to do after discharge, and what to do if they have certain symptoms. The booklets have been published in English, Spanish, and Portuguese.

“We recognize that we have a multicultural and diversified community, and we try to have resources to meet their needs,” Adler says.

The case management office also worked with physician leaders to facilitate the creation of specific discharge instructions for each diagnosis, which can be tailored to individual patients.

“When someone is going home with heart failure, we want them to know what they weigh when they leave the hospital and what to do if their weight goes up. They can refer to specific discharge instructions to assist them as to who to contact, what to follow up, and what medications they should be taking,” Adler says.

At Danbury, patient flow initiatives begin in the ED, which is staffed by a case manager who starts discharge planning before admission and ensures that the patients meet admissions criteria.

Case managers on the floor keep track of patients who are approaching discharge and notify the physicians and the rest of the clinical staff so there won’t be any delays in discharge.

When a patient comes in through the ED, the department’s full-time case manager gets involved.

(Continued on page 43)

CRITICAL PATH NETWORK™

Hospitalists, pharmacists partner to cut errors

Shorter lengths of stay, lower med costs result

Hospitalists collaborating with clinical pharmacists at Brookhaven Memorial Hospital Medical Center in East Patchogue, NY, were able to shorten length of stay, lower medication costs, and improve clinical outcomes.

A study conducted by **Saeed Syed**, MD, a hospitalist physician with Cogent Healthcare, a provider of inpatient management programs, compared results between patients treated by voluntary attending physicians and those treated by the hospitalist/clinical pharmacist team.

The hospitalist/clinical pharmacist group had a 23% shorter length of stay, a 21% lower cost of medications, and 1.5 fewer medications per patient than the comparable patient group treated by the voluntary attending model.

The hospitalist-pharmacist group also required less nursing care and had a reduced risk of adverse drug reactions and medication errors.

In addition, the study revealed that the hospitalist/pharmacist team at Brookhaven was able to reduce length of IV therapy for antibiotics and GI medications by 1.7 and 0.9 days, respectively.

For pneumonia patients, drug costs were reduced by an average of 29% (\$507 vs. \$360) per case.

Syed, who is the lead physician in the hospitalist program at Brookhaven, wanted to improve specific indicators including pharmaceutical aspects of care — i.e., drug expenditures, and trying to prevent medication errors. Since the hospital had an accredited and approved residency program in pharmacy, “we wanted to see how good the results would be from collaborating with them.” The study took place between

September 2003 and February 2004.

“What we initially intended was to use one of our in-house pharmacy graduates, but with this program, the residents were assigned to the hospitalist group in training,” Syed recalls.

“They started the day with us around 7:30 in the morning, sat with us [a four-physician group and two nurse practitioners], and went over all the patients. We then went to the floors and started rounds, so the pharmacy residents accompanied us on a rotating basis,” he notes.

As a result, Syed explains, the residents saw the actual care as it took place; noticed opportunities to substitute generic drugs; to perhaps move from a more expensive IV drug to an oral one; to be on guard for potential adverse drug reactions; and to help ensure proper dosage and use.

“The pharmacy residents also helped us with chart review for the pharmacy,” he notes.

This collaboration came naturally at Brookhaven, adds **Ken Cohen**, PhD, chief of clinical pharmacology and therapeutics.

“We have a history of extreme collaboration with the medical staff,” he notes. “We work closely with a number of physicians, reviewing the medications together with physician leaders and determining therapeutic choices, to consistently apply the same models to treat diseases.”

The clinical pharmacist residency program was instituted to train academically superior students at the doctorate level in what Brookhaven does in clinical pharmacy and acute care, Cohen says.

“At about the same time, we developed the hospitalist program; they are here all day and are familiar with the collaborative model, so it made sense for the pharmacy residents to enter into interdisciplinary rounds with the hospitalists,” he continues.

As part of the increased recent attention to medical errors, “we have heard about medications not being used exactly as they were intended. We wanted to have a pharmacist inserted in the process at the point of order generation. This way, many risks can be eliminated before pen hits paper, so to speak,” Cohen explains.

Both Cohen and Syed agree that a hospital does not have to have a residency program similar to theirs to benefit from a hospitalist/pharmacist collaborative model.

“A residency program is not required,” Cohen adds. “The advantage is the same as with medical residents — you get people who have recently emerged, are highly trained and motivated, and current as to what is possible with regard to the latest medical approaches — and frankly, their salaries are lower. But if you do not have such a program, if you can devote the time to allow a clinical pharmacist to go on rounds, there’s no reason why this model can’t work in nonresident facilities.”

“Most hospitals do have a graduate pharmacist in-house,” Syed notes. If not, while on the surface it may look as if you are losing some time from your pharmacist, “if you reduce drug costs 20% to 25% or cut lengths of stay by two days, it’s certainly worth it.”

In addition, by preventing errors, you are avoiding the calls that then have to be made to the pharmacist as part of the follow-up, he explains.

What’s more, Cohen adds, “The payback is not just in the hospitalist area, but for *all* physicians who work together with pharmacists in terms of medication management. We’ve achieved certain efficiencies across all levels of the organization.” ■

VA gets high marks for preventive, chronic care

Integrated medical record needed but not sufficient

A study published in the Dec. 21, 2004, *Annals of Internal Medicine* showed that patients enrolled in the Department of Veterans Affairs health system (VHA) were more likely than a national sample of similar patients in the general population to receive preventive care and chronic care recommended by established national guidelines.

The study compared 26 facilities in 12 VHA health care systems and 12 different communities; a total of 596 VHA patients and 992 patients identified through random-digit dialing; all who were involved were men older than 35.

The researchers measured quality over the period between 1997 and 2000, using RAND’s Quality Assessment Tools system to evaluate inpatient and outpatient care for 26 conditions.

The VHA scores were based on 294 of 348 indicators (there were no eligible patients for some indicators), and 330 indicators for patients on which to base national scores.

Included were such measures as aspirin for patients presenting with acute myocardial infarction, diet and exercise counseling for diabetes, and screening for colorectal cancer.

Here are the highlights of the findings:

- Patients from the VHA scored significantly higher for adjusted overall quality (67% vs. 51%).
- Patients from the VHA scored higher than the national sample for both chronic care (72% vs. 59%) and preventive care (64% vs. 44%).
- Patients from the VHA did *not* score higher than the national sample for acute care (53% vs. 55%).

“This same team a year and a half ago published a paper in the *New England Journal of Medicine*¹ that looked at quality in this country as a whole and basically concluded it was a flip of the coin as to whether or not you got good care,” notes **Steven M. Asch**, MD, MPH, of the West Los Angeles Veterans Affairs Medical Center and lead author of the *Annals* article.

“This spurred us to think about what sorts of systems do a better job, and if so, why. The VA came to top of mind because it has put together an information superhighway, measures performance, and holds providers accountable, so we embarked upon a study to see if indeed it was doing a better job, and we found that they are. In general, VA patients get the care they need two-thirds of the time,” he explains.

What’s the take-home message?

There are a number of significant take-home messages in the study, but according to Asch, one point stands out when it comes to quality improvement.

“For quality managers especially, what’s most significant is that what gets measured gets done,” he asserts.

In other words, the VHA advantage was most prominent in processes targeted by VHA performance measurement (66% vs. 43%), and least prominent in areas unrelated to VHA performance measurement (55% vs. 50%).

According to the authors, "Differences were greatest in areas where the VHA has established performance measures and actively monitors performance."²

Just as significant, Asch explains, is that there appears to be what he calls a spillover effect for improvement.

"So, for instance, if you look at a particular condition, the VA does best in things it is measuring; it does about the same in things that it does not measure and has no relationship [to the condition]; but in things that are kind of alike but not exact, it *still* has an advantage," he notes.

"So, for example, if the VA is tracking blood pressure control, it may not be tracking whether a patient with high blood pressure gets his creatinine measured," Asch stresses.

"But these patients at the VA *do* get their creatinine measured more often [than the nationwide average], even though it is not one of their performance measures. In other words, the VA also has an advantage in things that are kind of like the things that are being tracked," he continues.

VHA requires accountability

One of the factors that distinguishes the VHA, and is thought to be a contributing factor in the results of the study, is that the VHA, the largest health care delivery system in the United States, began in the early 1990s to institute an electronic medical record system, as well as an approach to quality measurement that assigns accountability to regional managers for processes in both preventive care and chronic condition management.

"The integrated medical record plays an enormous role," says Asch, but he adds that he considers it "necessary but not sufficient."

In other words, he explains, "Lot of folks think that if they just instituted electronic medical access they'd improve, but then they don't track performance or hold people accountable."

The system used by the VA, called CPRS (computerized patient record system), is quite interactive. "As a provider, it helps me remember things," explains Asch, noting that it is a reminding software.

"When I'm sitting at my desk [and bring up a

patient's record], it will say, 'How about giving him a flu shot?' Or if a patient is diabetic, it may note he has not had a hemoglobin A_{1c} in the last four months, and ask if I want to order one. At the VA, there is a terminal in *every* examining room," he notes.

"You can view your X-rays on the screen, or see the results of your colonoscopy; there is no more paper," Asch explains. "The universality is another thing that distinguishes [the VA] from other systems; *everyone* knows how to use it."

The authors argue that "the implications of these data are important to our understanding of quality management.

"The VHA is the largest health care system to have implemented an electronic medical record, routine performance monitoring, and other quality-related system changes, and we found that the VHA had substantially better quality of care than a national sample," they note.

"Our finding that performance and performance measurement are strongly related suggests that the measurement efforts are indeed contributing to the observed differences," they write.

"Performance measurement alone seems unlikely to account for all the differences; the VHA scored better even on HEDIS measures widely applied in managed care settings (but not in other settings) outside the VHA."²

What the VA has done is certainly replicable in other large health care systems, Asch notes, although it is extremely expensive. "But can we afford *not* to do it?" he poses. "It's disturbing to me and most providers — and many patients — that we are not getting what we need as often as we need to. If it requires investment to do so, we should do it."

Asch concludes with this thought: "I don't want to leave the impression that information technology is the be-all and end-all of performance improvement; embracing technology all by itself is not enough," he says. "You also have to track performance; tracking performance is the key to improving care."

References

1. McGlynn EA, Asch SM, Adams J, et al. The quality of health care delivered to adults in the United States. *N Engl J Med* 2003; 348:2,635-2,645.
2. Asch SM, McGlynn EA, Hogan MM, et al. Comparison of quality of care for patients in the Veterans Health Administration and patients in a national sample. *Ann Intern Med* 2004; 141(12):938-945. ■

NEWS BRIEFS

New Jersey hospital wins Baldrige award

Until St. Louis's SSM Healthcare broke the barrier in 2002, no health care system had won the coveted Malcolm Baldrige National Quality Award. Now there are four.

Robert Wood Johnson University Hospital in Hamilton, NJ, is the most recent winner. Among the achievements for which it was honored, Robert Wood Johnson University Hospital got its highest marks for customer loyalty; dramatic reductions in emergency department waiting times; surpassing national averages on a number of key quality indicators; and increasing retention rates for registered nurses to 99%.

Other previous health care winners include Baptist Hospital Inc. of Pensacola, FL, and St. Luke's Hospital of Kansas City, MO (2003). ▼

AHRQ releases new diabetes care guide

The Agency for Healthcare Research and Quality (AHRQ), in partnership with the Council of State Governments, has released *Diabetes Care Quality Improvement: A Resource Guide for State Action* and a companion workbook, both of which are designed to help states assess the quality of diabetes care and develop quality improvement strategies.

"As the lead federal agency supporting research in the quality, cost-effectiveness, and safety of health care, AHRQ is arming health care professionals, policy-makers, and local leaders with evidence-based information designed to facilitate improvements in diabetes care," said AHRQ director **Carolyn M. Clancy, MD**, in announcing the publication.

The guide and workbook provide an overview of the factors that affect quality of care for diabetes, present core elements of health care quality improvement, assist state policy-makers in using

the data from AHRQ's 2003 *National Healthcare Quality Report* for planning state-level quality improvement activities, and provide a variety of best practices and policy approaches that national organizations, the federal government, and states have implemented related to diabetes quality improvement.

The workbook includes six modules developed for state leaders as well as officials in state health departments, diabetes prevention and control programs, and Medicaid offices.

Some modules are targeted for senior leaders responsible for making the business case for diabetes quality improvement and taking action, while other modules provide the information necessary for program staff to develop and implement a quality improvement strategy.

The goal is that all groups involved in diabetes care work together as a team to improve the quality of diabetes care.

Diabetes Care Quality Improvement: A Resource Guide for State Action and its companion workbook can be found on-line at www.ahrq.gov/qual/diabqualoc.htm.

Printed copies may be ordered by calling (800) 358-9295 or by sending an e-mail to ahrqpubs@ahrq.gov. ■

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(Continued from page 38)

If the patient is going to be admitted, the case manager screens the patient to see what his or her benefits are and what kind of support system is available at home.

She talks with the family to determine if there are family members who can help with the care after discharge. If not, and it appears that the patient may need care after discharge, she starts looking at options such as skilled nursing facilities or a visiting nurse.

"Many times, patients show up with symptoms that could be treated, and they could be released back home; but because of issues in the family, it's easier to put them in the hospital," Imperati says.

In these cases, the case manager works with the physician to make sure that the clinical reasons for admission are well documented. If the patient doesn't meet criteria for admission, the case manager works with the patient and family to come up with other options.

"The case managers are getting good at direct nursing home placement. It's tricky for Medicare patients because they have to be in the hospital for three nights for Medicare to cover it. So if they come to the emergency room, they have to privately pay for nursing home care unless they have Medicaid or other long-term care coverage. It's quite a challenge," Imperati says.

The ED case managers screen for cases that don't necessarily meet admission criteria but might meet observation criteria. For instance, a patient who has chest pain but has not had a heart attack may be able to stay overnight for observation.

"The emergency room case manager plays a critical role to make sure the patient gets to the right level of care before he or she is admitted to the hospital," Adler says. The MAC nurse assesses what unit in the hospital best meets patient needs.

"Our policy is to identify right up front what a patient's discharge planning needs are likely to be. We want to care for the patients while they are here and not have them return because we didn't know about their home situation or transportation problems or things like that," says **Pat Morgan, RN, CCM**, supervisor of clinical resource management.

Physicians who want to admit a patient directly to the hospital from the office call the MAC nurse, who gets the admissions orders from the physician and makes sure the patient is met on arrival and escorted to a room.

"It provides customer service for the physician and for the patient who is not sitting around waiting in the admitting office," Adler says.

The MAC nurse knows what's going on in the entire hospital, where the vacant beds are, and how many discharges are anticipated during the day.

"She moves around the hospital and is on the unit when a patient leaves. She can put patients in a room quicker than the registration or admissions office can," Imperati says.

Every nursing manager in the hospital, the case management manager, and the housekeeping, facilities, and transportation managers and the administrator on call attend a 30-minute "muster" meeting each day to discuss what is happening that may affect patient flow.

"We have everyone in one room who can give a global picture of what's going on in the hospital, vs. having meetings on the floor when that staff know only what is happening on their floor," adds Morgan.

Participants at the meeting keep in mind any disasters in the community that may affect the hospital's census and patient flow.

For instance, when a school bus accident occurred last spring, the muster meeting was the forum the hospital used to identify plans to handle the patients.

"Everyone in every department works as a team and not as islands unto ourselves," Morgan says.

To make sure that patients' treatment is started in a timely manner, the hospital has created the position of admitting nurse, whose sole task is to help out when things get busy. She goes to any unit that has a lot of admissions and helps with the paperwork and assessments.

The hospital's case management model is aligned by physician, rather than geographically. The physicians know their case managers and how to get in touch with them. They work with the case managers to plan discharge from the moment the patient comes in.

"The physician-based model provides a challenge for the case managers who have to go all over the campus, but one result is higher patient satisfaction. The patients have a familiar name and face, no matter where they are on campus," says Morgan.

Danbury Hospital has an overflow unit that is opened up when the census is high. For instance, the unit was opened in January when a large number of patients were admitted for pneumonia.

The unit is used for medical patients, usually with similar diagnoses. For instance, a patient with a fractured hip would not be on the overflow unit but would go to the orthopedic unit.

The hospital's "unit without walls" is a huge

resource pool of per-diem staff including RNs, critical care nurses, nursing aides, and technicians, many of whom are cross-trained. When the census peaks, the manager of the unit without walls pulls in the staff.

"It's a big resource pool for us, and it helps with patient safety when the census skyrockets," notes Morgan.

[For more information, contact:

- **Doris Imperati**, RN, BSN, MHSA, CCM, Director, Clinical Resource Management, Danbury (CT) Hospital. Phone: (203) 739-6175. E-mail: Doris.Imperati@danhosp.org.] ■

Hospital initiative sees higher vaccination rates

Screening is a multidisciplinary effort

When Stamford (CT) Hospital began its pneumococcal vaccination screening, only about 16% of patients were being screened. In less than a year, the rate had risen to 76%, outpacing statistics from other hospitals in Connecticut.

"We had a real concern that elderly patients who should have been getting the pneumonia vaccine were not receiving it. Data have shown that a hospital-based vaccination program is more successful than other programs. An inpatient program represents a good opportunity to ensure that the patients get the preventative care they need," says **Ruth Cardiello**, director of case management for the 300-bed community teaching hospital.

The initiative is a multidisciplinary team effort, with case managers playing a key role.

"It's not just a case management initiative. It's a hospital initiative that is supported by all the disciplines. The whole team is reminding everybody else to make sure the patients are vaccinated. It's teamwork that results in better care for the patient," Cardiello adds.

Program components include a screening form used by nursing for all adult inpatients except maternity patients to make sure they have had the vaccination within the past five years and a series of checks and reminders to make sure that eligible patients receive the vaccine.

The nurses complete the screening assessment and administer the vaccine. The case managers

monitor the patient records and work with the nursing staff and the physicians to make sure that no eligible patient falls through the cracks.

"The nurses are the key in making sure the patients are vaccinated. The case managers support the nurses and make sure all patients get everything they need, including vaccinations if they are eligible, before they leave the facility," Cardiello says.

As a result of the initiative, begun in 2002, the hospital has experienced a steady increase in the rate of pneumococcal vaccinations, she says.

As part of its efforts to continuously improve its rates, the hospital is changing its system so that vaccine data are entered on-line when the patient receives the vaccine.

"This way, the vaccine history will be on the record for subsequent visits, and this will eliminate the need for nurses to retrieve old records to obtain vaccine history," Cardiello says.

The hospital already had a winter influenza vaccination initiative in place when core performance measures were implemented by the Centers for Medicare & Medicaid Services.

"We had been assessing all patients for influenza vaccinations for several years. The core measures gave us an added incentive to improve the program and to combine the influenza and pneumonia initiatives," she says.

Cardiello and her staff talked to their counterparts in other hospitals to find out how they were screening patients for pneumococcal vaccinations and obtained examples of forms, standing orders, and assessment tools. "We researched the literature and developed a standard assessment tool that assesses all adult inpatients and not just patients with pneumonia," she says.

A team of nurses, physician leaders, pharmacists, and case managers worked to develop the form and have made several revisions to make it simpler and easier to use.

Interdisciplinary rounds, implemented in mid-2004, also have helped the hospital increase its vaccination rates, Cardiello adds.

An interdisciplinary team of residents, dietitians, pharmacists, case managers, nurses, therapists, infectious disease nurses, and social workers meets with a physician leader three times a week to review patients on their unit.

"They make sure the discharge planning is taking place in a timely manner, that the patients are on the right medications, and that eligible patients have gotten the pneumococcal vaccine," she says.

Case managers conduct concurrent review on the patient charts to make sure eligible patients have received the vaccine. When they make rounds on their individual units, they routinely ask eligible patients if they have received the vaccine while they are in the hospital or before they were hospitalized and make sure that previous vaccinations were within five years.

"If patients are eligible for the vaccine, it's logical to make sure they get it while they are in the hospital. The hospital is a key area for screening and administration of the vaccine," Cardiello says.

The case managers put reminder stickers on the charts to remind physicians and nurses that eligible patients have not been vaccinated.

For instance, if a patient has a fever and can't receive the vaccine at the time he or she is screened, the case manager follows up to make sure the patient is vaccinated before discharge.

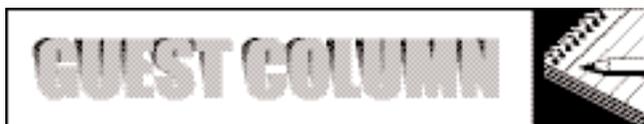
The 300-bed community hospital is staffed with experienced and certified case managers who provide utilization review and discharge planning and monitor quality initiatives.

The hospital has one disease management case manager who is the key person in the collection of core measure information. She conducts concurrent chart review for the chronically ill patients and makes sure they have been screened for eligibility and have been given the vaccine if appropriate.

Case managers are assigned to physicians and follow their patients throughout the stay in the hospital on the medical, surgical, and inpatient units. Case managers for the maternal child and psychiatry units specialize in patients on those units.

All case managers, including the disease case manager, review cases and identify issues that need to be reviewed. They all participate in the multidisciplinary team that develops and reviews standing orders and clinical pathways.

Teams developing the standing orders include physicians, nursing, ancillary departments, and case managers. "We looked at certain diseases where we had an opportunity for improvement and developed standing orders and pathways to help ensure that the patients receive care consistent with the latest standards," Cardiello says. ■



Root out causes of DP failures

How to apply accident investigation tools

By **Patrice Spath**, RHIT
Brown-Spath & Associates
Forest Grove, OR

Case managers rarely are involved in adverse patient incidents, yet they can learn a lot about discharge planning failures by applying accident investigation tools. Accident investigation techniques can be helpful for evaluating why discharge planning didn't go as expected.

One technique, change analysis, will assist case managers in determining what went wrong in a particularly difficult or challenging case. For example, why would discharge planning that is successful 99 times out of 100 fail to achieve expected goals one time? Change analysis examines planned or unplanned changes that caused undesired outcomes.

In an accident investigation, this technique is

used to examine the mishap by analyzing the difference between what has occurred before or was expected and the actual sequence of events.

The investigators performing the change analysis identify specific differences between the accident-free situation and the accident scenario. These differences are evaluated to determine whether the differences caused or contributed to the accident. The origins of change analysis can be traced back to before World War II.

This change analysis technique can be applied to cases in which discharge planning failed to achieve desired goals. As its name implies, this technique emphasizes change. To determine what went wrong, case managers must look for deviations from the norm — those unanticipated things that happened and ended up affecting the outcomes. Change analysis is particularly useful for identifying obscure contributing causes of discharge planning failures that result from planned or unplanned changes in a system.

During the application of change analysis, case managers should identify changes as well as the results of those changes. The distinction is important, because identifying only the results of change may prevent you from identifying all the causal factors of the discharge planning failure. Ideally, change analysis is done as a team project with everyone in the case management department contributing their thoughts and expertise.

Here's how change analysis can be applied to a particular case: A 72-year-old male patient with a head injury is seen in the emergency department (ED). The treating physician rules out a subdural hematoma but wants to admit the patient to the hospital for short-term monitoring. The patient asks to be discharged home, saying he lives alone but will have his son come and stay with him. The physician agrees to the discharge but only after the patient confirms that he will have someone caring for him at home. Unbeknownst to the physician and the nursing staff, the patient has a history of confusion and doesn't know quite how to contact his son. After returning to his home via taxicab, the patient deteriorates. His neighbors find him 24 hours later in a semicomatose state. The patient is admitted to the hospital with a significant hematoma.

To use change analysis to evaluate what went wrong in this case, the first step is to describe the undesirable situation and then describe the same or similar situation that did not result in an undesirable outcome. The goal is to determine what was different when the undesirable outcome occurred. In other words, what disturbed the balance of the system that usually operates as planned?

Using a change analysis worksheet similar to the one **shown below**, the unintentional and unwanted changes are identified. To expand the case managers' thinking about the causes of the failed discharge planning, the contributing factors are categorized into major elements that may have influenced the outcomes. In this example, the categories are: what, when, where, who, and how. These categories are useful in directing lines of inquiry and analysis. However, depending on the situation being investigated, other categories may be listed on the worksheet.

For each factor that is thought to influence the undesirable outcome, the team of case managers evaluating the event describes the "problem" situation relevant to that factor and the "ideal" situation. Issues that might be considered for each of the major factors are listed below:

WHAT

- What is the undesirable outcome?
- What occurred to create the undesirable outcome?
- What occurred prior to the discharge planning failure?
- What occurred following the failure?
- What operational activities were under way when steps leading up to the failure occurred?

Partially Completed Change Analysis Worksheet				
Factors	Describe Event-Producing Situation	Describe Ideal or Event-Free Situation	What is the Difference?	What is the Effect of this Difference?
WHAT				
WHEN	Patient seen in ED at 3 p.m. during shift change. Case manager was not available to see elderly patient with high-risk diagnosis who lives alone.	Prior to ED discharge, case manager always evaluates high-risk elderly patients who live alone.	No case manager intervention.	Case manager may have identified potential follow-up problem and recommended admission or arranged for appropriate home care.
WHERE				
WHO				
HOW	Patient's previous hospital records not available to physician/nurse.	Patient's previous hospital records available to physician/nurse.	Previous hospital records not available.	After review of patient's previous records, physician and/or nurse may have known patient would be unable to care for himself at home.

- What barriers should have been in place to prevent the undesirable outcome?
- What barriers were in place but failed to stop the undesirable outcome?

WHEN

- When did the activities leading up to the discharge planning failure occur?
- Was the facility on any special status at the time (e.g., emergency admission status)?
- Did the time of day have an effect on the failure?
- Did staff availability have an effect on the failure?

WHERE

- Where did the activities leading up to the event occur?
- What were the physical conditions in the area(s)?
- Where was the problem first identified?
- Was location a factor in causing the event?

WHO

- Who were the direct/indirect people involved caring for the patient?
- Which case managers were assigned to the unit during the incident?
- What were the training/qualifications of the case managers involved?
- Who was coordinating the patient's care?

HOW

- Was the discharge planning failure caused by an inappropriate case manager decision or action?
- Did procedures exist for the patient care activities involved?
- Did the procedures have sufficient detail to guide discharge planning decisions?
- Did the procedure have sufficient fail-safe mechanisms?

Once the “problematic” situation and the “ideal” are described, evaluate the differences or variances to determine the effect of each factor on the undesirable outcome. In this example, analysis of the incident revealed that the case manager who covers the ED did not evaluate the patient because the incident occurred during shift change. In addition, the ED caregivers did not have access to the patient’s previous hospital records. Without these records, they didn’t have

important information about the patient's past history of confusion.

The worksheet shows a partially completed change analysis containing information from this example to demonstrate the change analysis approach.

The worksheet allows the case managers to evaluate the differences between the “problematic” and “ideal” situation to determine each factor’s effect on the discharge planning failure. With a better understanding of the cause of the failure, the case managers now can work with the other involved departments to develop strategies for reducing the likelihood of future problems. ■

It’s not over: Prepare for a strange flu season

This year is a wild card, and anything still could happen. First, we had a dangerous shortage of influenza vaccine, followed by many high-risk people who couldn’t get or decided to forgo immunization. Fortunately, this has been a mild flu season — so far. But February and March are the historical peak months for influenza activity, and the large numbers of high-risk unprotected people make this a potential recipe for disaster. Influenza vaccine shortages and delays are a recurring problem, and at some point, we inevitably will face another influenza pandemic. Are you and your hospital prepared if we run out of luck? Do you know where to turn for guidance and help? Do you know how to prevent the spread of this infectious disease? Or how to handle major staff shortages due to record absenteeism?

Thomson American Health Consultants has developed an influenza sourcebook to ensure you and your hospital are prepared for what could happen this flu season — or the next flu season.

Hospital Influenza Crisis Management provides the information you need to deal with ED overcrowding, potential liability risks, staff shortages, and infection control implications for staff and patients. This sourcebook addresses the

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real threat of a potential pandemic and the proposed response and preparedness efforts that should be taken in case of such an event. Major guidelines and recommendations for influenza immunization and treatment are included, along with recommendations for health care worker vaccination and the efficacy of and criteria for using the live attenuated influenza vaccine.

Hospital Influenza Crisis Management will offer readers continuing education credits. For information or to reserve your copy at the price of \$199, call (800) 688-2421. Please reference code 64462. ■

CE questions

9. JCAHO issued standards requiring hospitals to develop and implement plans to identify and mitigate impediments to efficient patient flow. When did/do they go into effect?
 - A. July 1, 2005
 - B. Jan. 1, 2005
 - C. Oct. 1, 2004
 - D. Jan. 1, 2006
10. Which part of the hospital is particularly vulnerable to experiencing negative effects of inefficiency in the management of patient flow, according to the JCAHO?
 - A. post-anesthesia care unit
 - B. intensive care unit
 - C. orthopedics
 - D. emergency department
11. In 2003, before Seton Medical Center instituted its throughput department, the hospital had to divert patients coming in by EMS to the emergency department for 458.24 hours because there were no available beds. In 2004, the time for ED diversion dropped to how many hours?
 - A. 49.57
 - B. 100.52
 - C. 224.72
 - D. 90.65
12. At Danbury Hospital, direct admissions are handled by a mobile admissions coordinator, or MAC nurse who keeps up with what beds are available and facilitates the admissions process for patients and physicians.
 - A. true
 - B. false

Answer key: 9. B; 10. D; 11. A; 12. A

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CE objectives

After reading each issue of *Hospital Case Management*, the nurse will be able to do the following:

- identify particular clinical, administrative, or regulatory issues related to the profession of case management;
- describe how those issues affect patients, case managers, hospitals, or the health care industry in general;
- cite practical solutions to problems associated with the issue, based on independent recommendations from clinicians at individual institutions or other authorities. ■

CE instructions

Nurses participate in this continuing education program by reading the issue, using the provided references for further research, and studying the questions at the end of the issue. Participants should select what they believe to be the correct answers, then refer to the list of correct answers to test their knowledge. To clarify confusion surrounding any questions answered incorrectly, please consult the source material. After completing this semester's activity with the **June** issue, you must complete the evaluation form provided in that issue and return it in the reply envelope provided to receive a certificate of completion. ■