



## IN THIS ISSUE

■ **Pay for performance:** CMS announces even greater incentives for reporting quality data . . . . . cover

■ **Patient safety legislation:** This new law will affect error reporting at your organization . . . . . 136

■ **Discharge Planning Advisor** . . . . . 139

■ **Surgical infections:** Learn how organizations achieved dramatic results . . . . . 143

■ **Accreditation Field Report:** Find out what impressed JCAHO at a TN hospital . . 145

■ **The Quality-Co\$t Connection:** Did we really make a difference? . . . . . 146

■ **Also in this issue:** *Patient Safety Alert*

**Financial Disclosure:**  
Editor Staci Kusterbeck, Managing Editor Russ Underwood, and Editorial Group Head Coles McKagen report no consultant, stockholder, speaker's bureau, research, or other financial relationships with companies having ties to this field of study. Consulting Editor Patrice Spath discloses she is principal of Brown-Spath & Associates.

**OCTOBER 2005**  
VOL. 30, NO. 10 • (pages 133-148)

## Pay-for-performance incentives: Are you missing out on revenue?

*New trend in reimbursement may benefit quality professionals*

One thing quality professionals can agree on is that in health care today, every dollar counts. That's why pay-for-performance programs potentially can have a dramatic impact on your organization — by getting the attention of hospital administrators and opening the floodgates to needed quality resources.

Pay-for-performance programs increasingly are linking quality to reimbursement, and the Centers for Medicare & Medicaid Services (CMS) is exploring pay for performance with various demonstration projects.

Recently, CMS issued its final rule for FY 2006 rate increases for inpatient stays in acute care hospitals. The rule includes an extra increase for hospitals participating in Medicare's quality reporting initiative.

Even minor reimbursement changes can have an alarming impact on the organization, says **Judy B. Courtemanche**, president and CEO of Courtemanche & Associates, a Charlotte, NC-based consulting firm specializing in regulatory compliance and outcome management.

"Let's say an organization does not catch up with the change and continues to bill as it was," she says. "Then months down the road, it catches up with them and they now are in a payback position or must settle with the reimbursing for compounded reductions in reimbursement to make up the difference. With the volume that organizations deal with, changes compound rapidly."

In addition, results show that pay for performance can have a dramatic impact on quality. The CMS/Premier Hospital Quality Incentive Demonstration Project, which involves more than 270 hospitals using Premier's Perspective database, tracks hospital performance on a set of 34 quality indicators and pays annual incentives to top performers. Data from the project's first year show a trend toward significantly improved quality among the participating hospitals, with the median performance composite score for all hospitals going up 7.5%.

### **More leverage for quality**

With increased pressure to improve core measure data, it may be an opportune time to lobby for additional resources, such as extra staff so that

**NOW AVAILABLE ON-LINE! Go to [www.hpronline.com](http://www.hpronline.com).  
Call (800) 688-2421 for details.**

records can be abstracted sooner, advises **Susan Mellott, PhD, RN, CPHQ, FNAHQ**, CEO of Houston-based Mellott & Associates.

"Or quality leaders may be able to request software programs to display data in a more meaningful manner or request that an extra person be allowed to attend a conference or workshop pertaining to data use," she says.

Quality managers often are in the difficult position of guiding quality decisions for their organizations, while having little or no authority over the performance of clinicians, Courtemanche

notes. "Physicians and other health care professionals are not accountable to the quality managers and sometimes view them as regulatory thorns in their sides," she says.

Pay for performance presents a unique opportunity to redirect the organization into focused areas of performance, Courtemanche argues.

"Managers should become familiar with pay-for-performance expectations for their areas of responsibility," she says. "They should identify their current performance and work with finance to identify potential gain or loss with redirected payment systems."

As a quality professional, you're in a key position to assist leadership in identifying potential shortfalls in physician and organizational practice that could lead to reduced reimbursement, Courtemanche says. **(For strategies for improved reimbursement, see checklist, p. 135.)**

Once you know where your organization stands with reimbursement, you can take the next step: developing action plans to assess and address areas of concern.

"Quality managers need to be proactive in understanding these new requirements and foster appropriate action within their organizations," she stresses.

## ***Changing clinical practice is key***

In its Aug. 12 final rule, CMS announced that by reporting selected quality data, acute care hospitals will receive a 3.7% increase in payment rates for inpatient services. Hospitals that do not submit quality information will receive an increase of only 3.3%.

The Joint Commission has worked with CMS to align quality indicators so data will be collected only once, Mellott explains. "For those hospitals that are not JCAHO-accredited, I expect that the extra 0.4% increase would be beneficial to them, so they may consider participating if they are not already."

In addition to Medicare's efforts, increasing numbers of private insurers are linking outcomes to reimbursement.

There is no question that the trend toward pay for performance will help quality leaders get the attention of administrators, but unless there is a good relationship between administration and the medical staff, there may not be much improvement in terms of better outcomes for patients.

"Many medical staff are still reluctant to

**Hospital Peer Review®** (ISSN# 0149-2632) is published monthly, and **Discharge Planning Advisor™** and **Patient Satisfaction Planner™** are published quarterly, by Thomson American Health Consultants, 3525 Piedmont Road, Building Six, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Periodicals postage paid at Atlanta, GA 30304. POSTMASTER: Send address changes to **Hospital Peer Review®**, P.O. Box 740059, Atlanta, GA 30374.

Thomson American Health Consultants is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation. Provider approved by the California Board of Registered Nursing, Provider Number CEP 10864. This activity is approved for 18 contact hours.

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

### **Subscriber Information**

**Customer Service:** (800) 688-2421 or fax (800) 284-3291. **Hours of operation:** 8:30-6 M-Th, 8:30-4:30 F EST. **World Wide Web:** [www.ahcpub.com](http://www.ahcpub.com). **E-mail:** [ahc.customerservice@thomson.com](mailto:ahc.customerservice@thomson.com).

**Subscription rates:** U.S.A., one year (12 issues), \$469. Outside U.S., add \$30 per year, total prepaid in U.S. funds. Discounts are available for multiple subscriptions. For pricing information, call Steve Vance at (404) 262-5511. Missing issues will be fulfilled by customer service free of charge when contacted within 1 month of the missing issue date. **Back issues**, when available, are \$78 each. (GST registration number R128870672.)

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

Editor: **Staci Kusterbeck**, (631) 425-9760.  
Vice President/Group Publisher: **Brenda Mooney**, (404) 262-5403, ([brenda.mooney@thomson.com](mailto:brenda.mooney@thomson.com)).  
Editorial Group Head: **Coles McKagen**, (404) 262-5420, ([coles.mckagen@thomson.com](mailto:coles.mckagen@thomson.com)).  
Managing Editor: **Russ Underwood**, (404) 262-5521, ([russ.underwood@thomson.com](mailto:russ.underwood@thomson.com)).  
Senior Production Editor: **Ann Duncan**.

Copyright © 2005 by Thomson American Health Consultants. **Hospital Peer Review®**, **Discharge Planning Advisor™**, and **Patient Satisfaction Planner™** are trademarks of Thomson American Health Consultants and are used herein under license. All rights reserved.

**THOMSON**  
★  
**AMERICAN HEALTH  
CONSULTANTS**

### **Editorial Questions**

For questions or comments,  
call **Staci Kusterbeck**  
at (631) 425-9760.

change their practice patterns simply because administration asks them to do so," says Mellott. "Many hospitals are still struggling to get physicians to administer all of the medications that these guidelines require in a timely manner."

On the other hand, medical staff members at some organizations take the guidelines very seriously and have impressive success stories to report.

"The hospitals that have lower scores in these areas will have a hard job in convincing the medical staff to move forward if they have already educated the physicians and have gotten resistance," says Mellott. "The administration will have to increase their efforts to encourage the physicians to change their practice patterns."

Pay for performance demands that physicians practice evidence-based medicine and eliminate the potential for bad outcomes and poor performance, says Courtemanche.

"To perform at the top of the pack, physicians must achieve better outcomes than others in their area of expertise. To consistently perform at top levels, they need to eliminate undesirable performance within their practice settings," she says.

However, this places both organizations and physicians in an ethical dilemma, Courtemanche adds.

"If they accept patients who may not respond well to care interventions, they may see poor performance and loss of revenue," she explains.

Although the American Medical Association's February 2005 guidelines for pay-for-performance programs expressly state that "programs must not directly or indirectly disadvantage patients from ethnic, cultural, and socioeconomic groups, as well as those with specific medical conditions or the physicians who serve these patients," the risk does exist, Courtemanche says.

System changes may be needed to comply with core measure requirements, such as having required medications readily available in the emergency department or accessible through the pharmacy.

"The smoking cessation scores have been typically low," Mellott notes. "The cause of low scores is either because the organization is not addressing the issue or the patients are receiving the information but it is not documented well in the medical record. These are areas where the leadership of the hospital has more control over the outcome scores."

To ensure clinicians document procedures performed or medications given, consider switching

## Use this checklist to boost reimbursement under P4P

To maximize reimbursement under pay-for-performance programs, the following questions should be addressed by organizations, says **Judy B. Courtemanche**, president and CEO of Courtemanche & Associates, a Charlotte, NC-based consulting firm:

- ✓ What is your organization's current performance?
- ✓ Is there significant variation in practice patterns?
- ✓ Are physicians aware of evidence-based practice approaches?
- ✓ Does the organization embrace evidence-based practice?
- ✓ What are physician practice patterns that are affecting performance? What does current practice look like?
- ✓ Is performance as expected?
- ✓ Are physicians leading the pack, following, or somewhere in between?
- ✓ Is there significant variation among physicians in current practice patterns?
- ✓ What strategies has the organization developed to deal with variation in practice?
- ✓ Are these strategies effective?
- ✓ Does the organization perform proactive risk-reduction strategies to understand where outcomes fall short of expectations?
- ✓ Are outcomes and processes examined to identify opportunities to eliminate variation?
- ✓ Are concerns addressed with process owners?
- ✓ Does the organization assess the potential financial impact of outcomes and processes?
- ✓ For core measure initiatives, is performance optimal and reimbursement maximized?
- ✓ If not, what potential loss does the organization face due to changing reimbursement?
- ✓ Would even minor reimbursement changes have a significant impact on physicians and the organization?
- ✓ What protects the organization, staff, and physicians from unethical decisions based on patient selection by likelihood of performance outcomes?
- ✓ How will patients be protected?
- ✓ How will the organization identify patients who have not been included or who have been miscoded?
- ✓ How will the organization address whether care is not being provided to those patients who may affect performance scores? ■

to computerized charting. "I've had a great deal of success standardizing charting practices to capture and document essential information for core measures, such as vaccination status and smoking cessation instructions," reports **Diane Richey**, RN, BSN, CIC, CPHQ, director of quality/risk/case management at North Hills Hospital in North Richland Hills, TX. "We can input nonbypassed scripts to prompt the nurse to obtain answers to vital questions." A copy of the smoking cessation information is automatically printed out when the patient answers "yes" to being a smoker.

Sharing outcomes information directly with physicians, both during staff meetings and privately, has been an effective motivator for behavior change with some physicians, adds Richey. The physicians' individual core measure rates are confidentially fed back to them in a graph format comparing their compliance with the measures to those of their peers. "It is really an eye-opener for some of them who think their documentation is perfect," she says.

### **Long-term impact of P4P**

Pay for performance is an important step toward creating a safer health care system, as opposed to fee-for-service, which pays all providers equally regardless of whether the service actually is needed and regardless of the quality of the service, says **Martin D. Merry**, MD, adjunct clinical professor of health management and policy at the University of New Hampshire in Durham, and a health care quality consultant.

"The fee-for-service system regards the entire quality spectrum equally, from worst to best, perhaps even awarding poor quality "bonuses" in the form of paying for excess services and potentially preventable complications," he says. "A major reason why this problem has persisted, of course, is that health care quality has been so opaque that consumers and purchasers have had no effective way of distinguishing good vs. poor performance."

Among other benefits, pay for performance forces a greater transparency on providers, which is a cornerstone of the recommendations in the Institute of Medicine's 2001 report *Crossing the Quality Chasm: A New Health System for the 21st Century*.

Pay for performance should "greatly enhance the importance of quality professionals," Merry adds. "It will rescue them from what I experience

as an inordinate preoccupation with compliance-related activities and steer them more toward building quality system infrastructures that can finally generate the levels of safety and quality of world-class manufacturing and service industries such as Toyota and Ritz-Carlton," he says.

Pay for performance may mean that leaders finally will view quality not as a compliance or risk management issue, but as a genuine strategic imperative in maximizing reimbursement, Merry continues.

"Properly prioritized as a strategic imperative, these leaders might then finally begin making the necessary quality infrastructure investments so that their performance may begin to approach that of the Toyotas of the world," he adds. "Once this reality sinks in at higher levels of management, quality managers should begin to see the resources they need to pursue the organizational transformation to the information age that is so sorely needed in health care."

*[For more information, contact:*

- **Judy Courtemanche**, Courtemanche & Associates, P.O. Box 17127, Charlotte, NC 28227. Phone: (704) 814-0685. Web: [www.courtemanche-assocs.com](http://www.courtemanche-assocs.com).
- **Susan Mellott**, PhD, RN, CPHQ, FNAHQ, CEO, Mellott & Associates, 5322 W. Bellfort, Suite 208, Houston, TX 77035. Phone: (713) 726-9919. Fax: (713) 726-9964. E-mail: [mellottandassoc@att.net](mailto:mellottandassoc@att.net).
- **Martin D. Merry**, MD, 232 Tower Hill Road, P.O. Box 15, Sanbornton, NH 03269. Phone: (603) 286-7579. E-mail: [merrymd@comcast.net](mailto:merrymd@comcast.net).
- **Diane Richey**, RN, BSN, CIC, CPHQ, Director, Quality/Risk/Case Management, North Hills Hospital, 4401 Booth Calloway Road, N. Richland Hills, TX 76180. Phone: (817) 255-1901. Fax: (817) 255-1992. E-mail: [diane.richey@lonestarhealth.com](mailto:diane.richey@lonestarhealth.com).] ■

## **Patient safety legislation removes reporting barriers**

*Law ends fear of reprisal that stops many reports*

**I**t's a balancing act for most organizations — weighing the need for error disclosure, which may lead to system changes that prevent harm to future patients, against the threat of lawsuits.

Newly passed patient safety legislation now

offers protection, with the goal of encouraging voluntary error reporting.

The Patient Safety and Quality Improvement Act of 2005 provides full federal privilege to patient safety information reported to a patient safety organization (PSO).

### ***A very significant step***

This is a significant step for the health care industry, according to **James W. Saxton, JD**, chairman of the health care litigation group at Stevens & Lee, based in Lancaster, PA, and immediate past chairman of the American Health Lawyers Association's practice group on health care litigation.

"A significant hurdle for some organizations is the fear of reprisal to the reporting health care providers and the potential for discovery of disclosed information in any subsequent lawsuit that may result from the event," he says.

This legislation will help to remove those barriers by permitting voluntary disclosure of medical errors to a qualified PSO. The reported information will be used to share improvements in processes and procedures, which can lead to increased patient safety.

"Many organizations struggle with balancing the task of encouraging error disclosure, which can lead to improvements, against the potential for discovery and use of the information against the health care provider at a later time," says Saxton. "Our work has shown that getting to the root cause of frequency and severity is essential to reducing liability risk, as we have seen such efforts work effectively."

The legislation is long-awaited. Since 1997, the Joint Commission and other patient safety advocates have testified on numerous occasions before congressional committees, urging passage of a comprehensive patient safety bill.

By analyzing the underlying causes of adverse events reported to JCAHO's Sentinel Event database, organizations can be alerted to patient safety dangers, with recommendations provided for preventive solutions.

However, the number of reports in the database is only a small fraction of the actual number of adverse events that experts estimate occur each year.

"We've been trying to find ways to encourage more reporting of errors since 1997, when we went up to Capitol Hill to start the ball rolling for this legislation," says **Margaret VanAmringe**, vice

president for public policy and government relations for JCAHO. "Our assessment of reasons why organizations didn't report was quite striking."

One major reason was fear of retaliation — that the information revealed during an in-depth analysis of the root cause, as required by JCAHO, would be used against the organization.

"We were asking people to open up very sensitive information about the organization. So there was a lot of fear that this information, in the hands of the wrong people, could be used as fodder for legal action as opposed to education," says VanAmringe.

Since the legislation provides a safe harbor for information reported to a PSO, voluntary reporting should increase because the biggest barrier is removed.

"We think that this is going to be the boost that people need. But it doesn't take away all barriers. Organizations still have to have a culture that makes it clear to staff that there is no retaliation for reporting," VanAmringe says.

### ***Look for added value***

The PSOs should do more than provide a safe harbor; they also are charged with giving constructive feedback to organizations — an added value to encourage organizations to report, she explains.

"We have great hope for the PSOs, but this is a new animal, so we have to see what are they going to look like, who is going to create them, and what kind of activities will prove to be most helpful," VanAmringe says.

"But we will hopefully have more information than we have today, or at least we will be able to validate what we think are the major issues, by looking at what is reported," she notes.

During on-site surveys, JCAHO surveyors will be asking questions about how errors are handled within the organization and will ask staff about the process for reporting, VanAmringe says.

"Surveyors may even pull a staff member aside and ask 'If there is an error, do you know where to report it?' and 'Do you feel comfortable reporting?'" she continues. "And after the legislation goes through, on survey we can certainly ask, 'Do you report to a PSO or to multiple PSOs? Or what have you done to take advantage of the legislation?'"

The Joint Commission has not yet decided whether to change any standards as a result of this legislation, VanAmringe explains.

"It is just too early," she says. "Reporting to a PSO is voluntary, and we respect that. It's up to organizations to take advantage of the legislation, and hopefully they do. That would certainly be a good thing."

The Joint Commission expects to create a PSO or become part of one under the auspices of its new International Center for Patient Safety.

"And if we do that, we would move the Sentinel Event database there, so hopefully reports will increase," VanAmringe notes.

As it stands now, the Joint Commission's Sentinel Event database is "probably the most comprehensive database of medical errors in the country," VanAmringe says.

"There are other niche databases that only collect anesthesia or medication events, but we collect all types of events that meet the threshold of being serious errors," she notes. "We would work with other PSOs to share anonymous data as envisioned by the legislation."

### ***The first step***

As a quality manager, your first step should be to inform leadership and staff about the legislation and its impact.

"There needs to be some education within the hospital, to let people know that the information that's provided will be kept confidential and privileged, and that will be very helpful for them. Shortly, we expect some guidance as to the certification of PSOs, and once that is out, there will be PSOs out there for reporting purposes," says VanAmringe.

"It's better to report now than to wish you reported later, when somebody comes knocking on your door asking for information that you wish you kept closer to the vest," she points out.

Quality managers can expect the need for additional full-time equivalents, since there will be expanded external reporting for hospitals, as well as aggregate evaluative information on the cause and prevention of medical errors, says **Jeffrey Driver**, chief risk officer for Stanford (CA) University Medical Center.

Education should begin immediately so administrators, managers, and caregivers understand that the legislation will create a federal privilege that in effect creates a non-punitive safe space to transmit medical error, accident, and near-miss information beyond a hospital's organized peer-review committees,

without fear that such information could be discovered and used in a lawsuit, he advises.

In the future, the safe space will extend further to PSOs as defined by the legislation.

"However, at this point, it is important to stress that there are no designated PSOs and therefore, a hospital's medical error, accident, and near-miss external reporting policy must be followed in its present form, until further notice," Driver points out.

### ***Choose carefully***

The legislation may create a perception that a general federal privilege already is in place that allows hospitals and providers to share medical error and near-miss information outside traditional protected borders, such as a hospital peer-review committee, Driver says.

"This can be remedied by implementing education about the legislation, its key features, as well as its limitations," he adds.

Consider having a defined position within a particular hospital department handle reporting of medical errors to external sources, Driver recommends.

"This will help to reduce the possibility of external reports of medical errors or near-misses being reported to a third party for which there is no evidentiary discovery privilege," he points out.

When PSOs do become available, it's important to choose carefully which one you report to, VanAmringe advises.

"You want to make sure that you are reporting to a PSO that provides you added value. If you just get the safe harbor, that doesn't take you as far as the legislation intended," she says.

"It intended for PSOs to work with organizations to answer questions and give tools, resources, and comparative data, so you can make changes in systems, policies, and practices," VanAmringe adds.

*[For more information, contact:*

- **Jeffrey Driver**, Chief Risk Officer, Stanford University Medical Center, Administrative Services, 860 Stanford Shopping Center, MC 5716, Room 213, Stanford, CA 94304. Phone: (651) 725-6996. E-mail: JDriver@stanfordmed.org.
- **James W. Saxton**, JD, Stevens & Lee, 25 N. Queen St., Suite 602, P.O. Box 1594, Lancaster, PA 17608-1594. Phone: (717) 399-6639. Fax: (717) 394-7726. E-mail: jws@stevenslee.com.] ■

# Discharge Planning Advisor<sup>®</sup>

— *the update for improving continuity of care*

- Accelerated discharge
- Staff cooperation
- Placement strategies
- Reimbursement
- Legal issues
- Case management

## Innovative program helps homeless, frees up beds

*Collaboration among competing health systems provides post-discharge care*

An unusual collaboration among three competing California hospitals is providing much-needed post-discharge care for homeless people. It is linking those individuals to ongoing medical benefits while freeing up hospital beds for more acute patients.

Establishment of an innovative homeless shelter — where people who need care after discharge are allowed to stay 24 hours a day — came about after representatives of homeless services in the community asked to talk with hospital officials about homeless people who were being discharged from the facility but still needed follow-up care, says **Kate Tenney**, RN, manager for case management at Sutter General Hospital in Sacramento, CA.

### ***Providing an address and shelter***

“In California, if you are going to have home care, you have to have a home,” Tenney adds. “They won’t see you on the street or in a car. Homeless people who had no address and no physician were showing up at shelters with dressings that needed to be changed.”

When Sutter case managers met with the advocacy groups, which included the Salvation Army, they brought along case managers from two other major hospital systems, she says.

“We decided that what we needed were shelter beds where patients could stay 24 hours a day or could come there and get services during the day,” Tenney explains.

To establish what is known as the Interim Care

Program, each of the hospital systems donated \$50,000, and the state of California contributed \$150,000, she says.

The program, which uses beds located within the Salvation Army of Sacramento facility, opened in April 2005, has a capacity of 18, and averages about eight to 12 patients a day, Tenney adds.

The managers of the three hospitals’ case management departments serve as permanent board members, she points out. They represent the sponsoring hospital systems, which in addition to Sutter Health include Catholic Healthcare West and the University of California-Davis Medical Center.

Also represented on the board, Tenney says, are the Salvation Army, the California Department of Assistance, and MAAP, formerly the Mexican American Alcoholism Program, which is a foundation established to promote the welfare of California’s Latino population.

“When our individual case managers have a patient they think would benefit from the program, they run it by someone on the board, and the nurse on the project looks over what the patient will need,” she explains.

“For case managers who normally have to see patients discharged to the street knowing they will come back with an infected wound, it’s very positive to know we can put them somewhere safe,” Tenney notes.

Only individuals with a medical need — such as keeping a leg elevated or having a dressing changed — are allowed to stay in the 24-hour

shelter, she says, noting that homeless shelters normally are open only at night.

“We have been very conservative about who we send there — we didn’t want anything to go wrong.”

A part-time nurse makes sure the patients follow physician orders, keep their wounds clean, and get to their scheduled appointments, she notes.

One recent shelter patient was an 18-year-old whose family lives on the river. She had broken her leg. Only the girl stayed in the shelter, because the rest of the family didn’t need to be there, Tenney says.

### ***Unanticipated benefits***

The program has been particularly helpful, she points out, for homeless patients who are in need of surgical procedures but otherwise wouldn’t have them because of concern by physicians that they had nowhere to recuperate and couldn’t take care of themselves afterward.

“This turns out to be one of the biggest benefits, and one that we had not anticipated,” she says. “We were not aware that people weren’t getting procedures done because they had no safe place to go. Now they can actually have the surgery.”

“There was one gentleman — in his 40s and with an alcohol problem — who was hit by a car a number of years ago and needed to have pins removed and reconstruction done to both ankles,” Tenney adds. “He had needed [the surgery] for a while but had to be able to do dressing changes, because an infection could have made him lose his legs.”

“He came in and said the physician wanted to do the surgery if he could get into the interim care program,” she says.

“I saw him a few days ago, and he was up and around. Home health [nurses were] coming by [the shelter] to give him wound care and intravenous antibiotics,” Tenney says.

Without the support provided by the shelter, notes **Barbara Leach**, RN, director of case management for Sacramento Yolo Sutter Health, the man “never would have had the surgery, or would have had it and been stuck in the hospital, [becoming] someone who could not be discharged and would be staying for free.”

In addition to preventing the financial shortfall that results from the hospital stay of a nonpaying patient, she explains, “[the program] opens up

hospital beds that we otherwise would not be able to place patients in.”

Having the option of referring patients to the Interim Care Program helps prevent the misunderstanding and resentment that can occur when homeless people are returned to a shelter after receiving treatment in the emergency department (ED), Tenney notes.

“A lot of times, homeless patients come into the ED with multiple problems but are there for one particular thing,” she explains. “We deal with that one thing, and then they are back on the street. When they end up back at the shelter, the [shelter managers] believe we’re just dumping them without taking care of their problems.”

The misunderstanding is that they mistakenly believe that all health care is provided in the hospital, Tenney adds. “The community expectation is that when [the homeless person] comes into the ED, we take care of everything.”

Her explanation of the situation during the initial conversation with the homeless advocates led to their asking Tenney to get involved in devising a solution, and ultimately the group began meeting on a regular basis, she says.

### ***Expanding the mission***

Although the program was designed for people who need follow-up care after hospitalization, it has been expanded to include ED patients who don’t need to be in the hospital, Tenney adds.

“In the past,” she says, “with the logistics of the homeless, the only real access to care is through the ED. If [they] call the doctor’s office and say, ‘I need to come see you,’ if there’s no insurance, the likelihood is they’ll be turned away.

“If they go to a community clinic,” she continues, “they’ll be put in line with everyone else who needs a procedure, and it might be a long time before they get what they need. The simplest way of accessing care has been to wait until they’re very ill and walk into the ED.”

Another benefit of the interim care shelter is that it provides linkages to community resources that the patient otherwise wouldn’t have known about, Tenney says, “like finding a primary care physician or a drug rehab program or getting into a clinic for ongoing medical care and getting that funded.”

For some of the homeless patients, many of whom don’t have insurance, staying at the shelter provides the opportunity to qualify for Medicare or Medicaid, she adds.

Individuals who are homeless typically “have some sort of addictive personality or substance abuse problem, usually an alcohol or drug problem,” Tenney points out.

For that reason, she says, they are very resistant to anything that will permanently take them off the street.

“For someone with a chronic disease to go into a facility, they have to sign over their resources to that facility forever, which eliminates the ability to go out and buy a fifth of whiskey every other day,” Tenney notes.

“Decisions are made around that, so they are not willing to give up their freedom. They avoid the health care system and only come in when they are very ill,” she explains.

Such people rarely take the medications they are prescribed, she says, either because they don’t understand the purpose or because they sell them on the street.

### ***Teaching the meaning of regular care***

Getting these individuals connected to a clinic that can provide ongoing care “teaches them what it’s like to have health care, to seek care on a regular basis,” Tenney adds. “When they do that, an illness doesn’t get as serious as it otherwise might.”

Because they have never before been involved with the health care system except in an emergency, many of the shelter clients need guidance in accessing care, Leach explains.

“It’s a real learning experience,” Tenney adds. “These are people who don’t even know how to ask the questions. [Staff at] places like the Salvation Army are much better at speaking their language, which is a crucial part of it. They translate after we tell them what the medical needs are, and then they tell the patients how to go about getting those needs met.”

The aspect of the program that is of most concern at present is obtaining the funding to continue it when the initial allocation comes to an end in April 2006, Tenney says. One of the challenges has to do with measuring the initiative’s effectiveness, she notes.

“We have to come up with some way of showing success,” Tenney says. “We don’t know what that looks like. Is it a certain bed capacity, the fact that it’s still running? We’re not quite sure what we will use.”

Originally, the idea was to keep track of the hospital days saved when a person is at the shelter instead, she adds, “but there’s not a real correlation between a stay at the homeless project and a stay at the hospital. A lot of the [shelter residents] we wouldn’t have kept in the hospital.”

Another possibility, Tenney notes, is to look at the cases in which a person initially was unfunded and classified as self-pay, and then on the next visit was on Medicaid. Because the federal government gives money to the state to affect homelessness, she adds, another way to measure success might be to take credit for getting people off the street.

“The California Hospital Association has a grant for putting together a data collection database that we are going to try to apply for,” Tenney says. “We’re hoping that if we get that, we will have an experienced person put together a measurement [tool].”

She points out, however, that saving money and reducing lengths of stay were not the motivating factors for Sutter Health’s part in the project.

“Sutter has a mission to provide charity care, and that was our main reason for participating,” Tenney adds. “It was not so much [about] cutting back on care but to be active in the community.”

One of the things that makes the project unique, Leach points out, is that it involves the collaboration of three competing hospitals. That kind of cooperative arrangement is particularly difficult in the state of California because of laws designed to prevent monopolies from forming, she says. “It’s exciting because there are no such laws around [projects of] community benefit.”

“It’s made the case managers involved feel that we are doing incredible work, with outcomes we can see with our own eyes,” adds Tenney. “The fact that we can come together like this and collaborate in the community has made this one of the most fulfilling situations I’ve ever seen in health care. It’s been a great experience for all of us.”

## **REPRINTS?**

For high-quality reprints of articles for promotional or educational purposes, please call **Stephen Vance** at (800) 688-2421, ext. 5511 or e-mail him at [stephen.vance@thomson.com](mailto:stephen.vance@thomson.com)

(For more information, contact:

- **Barbara Leach**, RN, Director of Case Management, Sutter General Hospital, Sacramento, CA. E-mail: leachb@sutterhealth.org.
- **Kate Tenney**, RN, Manager of Case Management, Sutter General Hospital, Sacramento, CA. E-mail: tenneyk@sutterhealth.org.) ■

## Sutter Health seeks dialysis solutions

*Long stays expensive, risky*

One of the biggest discharge planning challenges at Sutter General Hospital in Sacramento, CA, involves patients who need dialysis after they come into the hospital, says **Kate Tenney**, RN, manager of case management.

These might be people who didn't need dialysis before but have renal failure during the course of the hospital stay, she explains, or they might be dialysis patients who were refused care in a dialysis unit because of noncompliance.

In some cases, there are no dialysis chairs available in the community, Tenney adds, or the person can't tolerate sitting in a chair and needs to lie down during the procedure. "They will stay for months at a time because of the need for dialysis, and no skilled nursing facility [SNF] to send them to."

The issue, says **Barbara Leach**, RN, director of case management for Sacramento Yolo Sutter Health, is that "the patient has no ability to sit up and [be transported] to dialysis. They can't go to a SNF because of their inability to do outpatient dialysis."

"The rule is they can go [to a SNF] if they can get up out of a wheelchair and walk to the dialysis chair and then get back up," adds Tenney. "But probably the biggest problem is patients who have been banned from treatment [at dialysis units] because of noncompliance."

Not only are dialysis patients among the most expensive patients to keep in the hospital, Leach says, but the prolonged stay is detrimental to their condition. "There are huge risks to being in the hospital unnecessarily," she points out. "The longer you stay in bed, the more debilitated, the more exposed to other injuries you become."

Leach and Tenney are seeking a solution to the problem and would welcome feedback from

colleagues at other facilities who may have dealt with the same situation.

"We've talked to a local SNF about building dialysis units within their [facility] that we would help them set up," Tenney continues.

"We had hoped to take a couple of rooms and to provide them with staff and chairs, but the state has laws around whether or not you have a dialysis unit in a facility, and you can't get reimbursed for it under the current laws," she adds.

Another option that is being pursued, Tenney notes, is getting licensing for a freestanding dialysis unit next to the facility that would have both chairs and beds.

While Sutter Health is not going so far as to try to change the law, she says, "we did say we would be happy to participate on any level if they were running into barriers and needed us to step in and testify. "Eventually, we hope the [state] will look into [changing] the law, because they are paying for these patients to stay in the hospital," Tenney adds. "It's in their best interest to make this a priority."

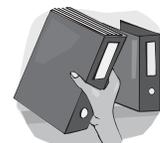
This kind of activism on the part of health care organizations is a new trend, she suggests, born of the need to make the most efficient use of limited funds.

"Hospitals more and more are going out to the community and saying, 'Let's work together to create something [because] this is impacting our hospital and our community,'" she adds. "I think this is a shift. In the past, [a hospital] would not be so involved."

*[Editor's note: If you have feedback on this issue, please contact Discharge Planning Advisor editor Lila Moore at (520) 299-8730 or by e-mail to lilamoore@mindspring.com.] ■*

### BINDERS AVAILABLE

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



If you need copies of past issues or prefer on-line, searchable access to past issues, you may get those at [www.ahcpub.com/online.html](http://www.ahcpub.com/online.html).

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

# Quality leaders work to reduce surgical infections

*Quality managers 'can have a very visible impact'*

*(Editor's note: This is the second of a two-part series on surgical infection prevention. Last month, we explored ways to improve core measure data. This month, we give strategies to reduce surgical infections.)*

Increased public scrutiny of hospital performance on surgical infection prevention measures will continue, quality leaders predict. "From the point of view of quality managers, this is a wonderful thing," says **Terry Hill, MD**, medical director for quality improvement at San Francisco-based Lumetra.

"For all of us trying to improve care, we always struggle with not having enough resources and not being able to sustain leadership attention," he says. "Having publicly reported measures gives quality managers more traction."

As a result, surgical infection prevention now will get sustained attention from hospital administrators, Hill predicts. "Having publicly reported measures will get the attention of CEOs so the project stays on the front burner, which is one of the most important things for the quality manager. This is an area where the quality manager can have a very visible impact in a short period of time."

Use the following strategies to reduce surgical infections:

- **Ensure patients get antibiotics in recommended time frames.**

When researchers looked at 34,133 Medicare inpatients undergoing major surgery in 2001, they found that only 55.7% received antibiotics in the recommended time frame of one hour before incision, 92.6% received the correct antibiotic, and 40.7% of patients had antibiotics discontinued within 24 hours following surgery to limit resistance to antibiotics.<sup>1</sup>

"There is a great potential for improvement in the processes of care known to reduce surgical-site infections," says **Dale W. Bratzler, DO, MPH**, the study's lead author and principal clinical coordinator for the Oklahoma Foundation for Medical Quality, based in Oklahoma City, and immediate past president of the American Health Quality Association. "Despite more than 40 years of research demonstrating the importance of providing antibiotics within a short window of time

before an incision, our study demonstrated that many patients were not receiving antibiotics at the optimal time."

The Surgical Infection Prevention (SIP) project was jointly launched in August 2002 by the Centers for Medicare & Medicaid Services and the Centers for Disease Control and Prevention to improve the safety of surgical care through the reduction of postoperative complications.

Over the past three years, several hundred hospitals have worked with their local Medicare Quality Improvement Organizations to redesign procedures and protocols to cut the rate of surgical infections, such as ensuring surgical patients are given antibiotics within 60 minutes before incision.

The Surgical Care Improvement Project (SCIP) is scheduled for national rollout and implementation in January 2006, and will replace SIP. (For more information on SCIP, go to [www.medqic.org/scip/](http://www.medqic.org/scip/).)

Quality professionals can use delivery of the antibiotic as a measure to monitor performance and assess how changes in systems of care affect performance on this measure, Bratzler says.

"There is a long list of activities that have been demonstrated to reduce the risk of a surgical-site infection. Although it is not possible to prevent all infections based on current science, many are preventable," he says, pointing to 1999 guidelines for prevention of surgical-site infections published by the Hospital Infection Control Practices Advisory Committee.

Proper selection and timing of antibiotic prophylaxis, use of sterile instruments, avoiding shaving of the surgical site, control of blood sugar, and avoiding operations on patients with infections remote to the surgical site are all proven ways of reducing infection rates, adds Bratzler.

- **Obtain staff support and buy-in.**

Explaining the rationale behind a desired change with supporting literature can have a dramatic impact on clinical staff compliance, says **Jill Garrett, RN, CPHQ**, perioperative care manager at Memorial Hospital in Colorado Springs, CO. The organization participated in CMS' SIP project.

"At an educational inservice for perioperative staff, I presented a picture of a dramatic wound infection and the additional incurred costs," she says. "This really was the key, connecting the present surgery to potential outcomes."

Demonstrating the loss of quality of life to the surgical patient makes a bigger impact on health care providers than talking about hospital costs,

Garrett adds. "Nurses want good outcomes for their patients. If a knee replacement implant becomes infected, there can be two or more additional surgeries. This is devastating to a patient's life."

Clinical staff tend to focus on the here and now, not necessarily the long-term effects or outcomes, she explains. "I tried to convey the importance of their job and the effect it can play for many years to the patient. Relaying research studies and current literature in understandable means was critical. Once it makes sense, it is embraced and becomes practice."

The SIP measures have been integrated into the peer review process at Shreveport-based Louisiana State University Health Sciences Center, with identified cases sent to each practitioner for comments and to identify what steps will be taken to improve performance, and results reported to the governing board.

When a case is identified, such as the antibiotic not given within 60 minutes before incision, the chart is sent to the physician for comments as to why it was not administered. "It serves to remind the physician of the standard, and that the indicator and their performance is being monitored and reported," says **Leisa Oglesby**, assistant hospital administrator of quality.

- **Use rapid-cycle change cycles.**

Rapid-cycle change cycles are most effective, requiring consistent monitoring and real-time feedback, Garrett says. For example, in the transition from razors to clipper use for hair removal, a supply issue was identified. "During my daily chart monitoring, I discovered that razors were slipping back in. After further investigation, insufficient stocking of the clipper heads had occurred. Frequent checking with staff to assess this issue and changing the stocking process solved the problem."

When the rapid cycle begins, successful implementation demands full attention for a short time period. "It is full immersion with concentrated efforts to hardwire the changes," she adds. "My role as a quality manager was to facilitate the change, address the system failures, and liaison for best practice."

The staff's personal commitment to hair removal by clippers was an essential factor in obtaining support from surgeons, although this measure was strongly resisted in the past, adds Garrett. To be proactive, staff initiated the use of clippers when the patient arrived in the OR.

Begin by testing one critical procedure that is

high volume at your organization and see what results you get, recommends **Karen Jones**, manager of acute care services for Oak Brook-based Illinois Foundation for Quality Health Care.

"Once you get positive results, spread it to other areas of interest," she explains. "It might be difficult to get all different physicians and procedures on board to start with."

- **Enlist the help of a physician champion.**

One hospital in the collaborative selected an orthopedic surgeon to work with on discontinuation of antibiotic within 24 hours following surgery, and after achieving positive results, it got the attention and buy-in of other orthopedic physicians, Jones reports.

"Having a physician or surgeon as a champion is absolutely of the highest importance to make these things happen," she says. "They have a lot of influence over their peers. There are a lot of nonbelievers who don't want to take part and have to be convinced, and who better to convince them than one of their peers?"

When the organization set out to ensure that prophylactic antibiotics were given within an hour of incision, the chief of anesthesia was the champion for this change, says Jones. "The appropriate antibiotic was being administered, but timing was inconsistent. Anesthesia agreed to own this process to decrease variability. Frequent feedback cemented the process."

The anesthesiologist now administers the antibiotic when the patient arrives in the OR suite. This ensures more consistent timing, as opposed to giving antibiotics in the holding area before the patient goes into the surgical suite, she adds. "Timing can vary then, since perhaps the suite they are going into isn't available as soon as they think it is."

## Reference

1. Bratzler DW, et al. Use of antimicrobial prophylaxis for major surgery: Baseline results from the national surgical infection prevention project. *Arch Surg* 2005; 140:174-182.

[For more information, contact:

- **Dale W. Bratzler, DO, MPH, Principal Clinical Coordinator, Oklahoma Foundation for Medical Quality, 14000 Quail Springs Parkway, Suite 400, Oklahoma City, OK 73134. Phone: (405) 840-2891, ext. 209. Fax: (405) 840-1343. E-mail: dbratzler@okqio.sdps.org.**
- **Jill Garrett, RN, CPHQ, Perioperative Care Manager, Memorial Hospital, 1400 E. Boulder, Colorado Springs, CO 80909. Phone: (719) 365-2786. E-mail: Jill.Garrett@memhospcs.org.**

- **Terry Hill, MD**, Medical Director for Quality Improvement, Lumetra, One Sansome St., Suite 600, San Francisco, CA 94104-4448. Phone: (415) 677-2000. Fax: (415) 677-2195. E-mail: [thillmd@pacbell.net](mailto:thillmd@pacbell.net).
- **Karen Jones**, Manager, Acute Care Services, Illinois Foundation for Quality Health Care, 2625 Butterfield Road, Suite 102E, Oak Brook, IL 60523-1234. Phone: (630) 928-5812. E-mail: [kjones2@ilqio.sdps.org](mailto:kjones2@ilqio.sdps.org).
- **Leisa Oglesby**, Assistant Hospital Administrator of Quality, Louisiana State University Health Sciences Center, 1541 Kings Highway, Shreveport, LA 71130. Phone: (318) 675-5030. Fax: (318) 675-4646. E-mail: [logles@lsuhsc.edu](mailto:logles@lsuhsc.edu). ■

## ACCREDITATION *Field Report*

### JCAHO impressed with internal transfer

*Surveyors liked evidence of reduced handoff errors*

During an April 2005 survey at Fort Sanders Sevier Medical Center in Sevierville, TN, JCAHO surveyors used the Survey Activity Guide (SAG) as their own guide for every system tracer they did, reports **Nancy Van Voorhis, RN, CPHQ**, manager of quality and clinical care. "As we sat down at the system tracer sessions, the surveyors would pull out their SAG section on that system tracer. So my best advice is to use the Survey Activity Guide for your prep tool. We did, and we did fine."

Here are key points of the survey:

- **Surveyors wanted to know what was done in response to data.**

"They want to see evidence that you are doing something with the data — not just collecting and analyzing but that you are actually taking action on the things you are finding," she says. "We shared information on things we had improved on and also let them know that there were things we had worked on that didn't always work."

For instance, a pneumococcal vaccine protocol has worked extremely well. "On the other hand, we, like many others, continue to struggle with

documentation of all the components for written discharge instructions for heart failure patients."

Van Voorhis kept separate notebooks with the required information for core measures.

"We were advised to only provide information as they requested it, not to leave manuals of data and minutes at their disposal. We had worked with our local quality improvement organization [QIO] on core measures projects, and I put a manual together with our results as a hospital to show how we compare nationally and statewide. They really liked that," she says.

Van Voorhis also included the PDCA (plan, do, check, act) work done with the QIO projects and several other performance improvement activities being monitored, such as ongoing medical record reviews and staffing effectiveness.

- **Surveyors liked the organization's internal transfer sheet.**

"The surveyors indicated the most mistakes happen during handoffs and inquired what we are doing to prevent these mistakes," she says.

An interdisciplinary form is used with all the information that would be given in an oral report, so the person receiving the transfer has this for quick reference and doesn't need to write it all down. "It doesn't substitute for the oral report, but it complements it," Van Voorhis notes.

- **Use of range orders for medications was discouraged.**

Surveyors wanted to see that policies existed to give clear guidelines for medications given for mild, moderate, and severe pain, and a specific indication for the purpose of the medication, such as pain or nausea. "The idea is to take out as much guesswork as possible for the nurses," says Van Voorhis. "It should not be at the discretion of the nurse. The nurse should have definite guidelines for what to give."

- **Surveyors attended an interdisciplinary discharge planning meeting.**

She invited surveyors to one of the organization's discharge planning meetings. The meetings are held twice weekly and include the hospital chaplain, respiratory therapist, coder, pharmacist, physical therapist, dietitian, case manager, utilization manager, infection control nurse, and staff nurses.

"We meet and discuss discharge planning needs for all patients to address what help is needed. After attending the meeting, the physician surveyor indicated he rarely has a chance to see the interdisciplinary process in action. They never asked us one more thing about interdisciplinary

communication or documentation of interdisciplinary care plans, because they saw our plans in action. It was probably one of the most useful invitations I've ever extended to anyone."

[For more information, contact:

- **Nancy Van Voorhis, RN, CPHQ, Manager, Quality and Clinical Care, Fort Sanders Sevier Medical Center, Sevierville, TN 37862. Phone: (865) 429-6578. E-mail: nvanvoor@covhlth.com.] ■**

## THE QUALITY - COST CONNECTION

## Did we really make a difference?

*How to measure the effectiveness of PI*

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

**M**easuring the effectiveness of actions intended to improve patient care is an important element of performance improvement. Effectiveness evaluation determines whether an intervention has had the intended effect. It is the "check" portion of the plan, do, check, act (PDCA) continuous improvement cycle. Yet, effectiveness evaluation often is just an afterthought.

One golden rule is that the intervention and its evaluation should be planned simultaneously. It is important to decide on the evaluation design and methods before interventions are introduced. Some basic decisions are required before an evaluation strategy can be specified. These decisions should be made through a collaborative process with those who will use the evaluation results and those implementing the improvement plans.

The types of factors to be determined prior to implementing action plans should include overall purpose of the evaluation; main questions that the evaluation should answer; available resources (financial, personnel); and deadline for the evaluation results. These decisions have to be made well before the improvement plans are implemented since they influence the evaluation methodology. In particular, the rationale for the evaluation will

## CE questions

13. Which action is recommended for quality professionals regarding the trend toward pay-for-performance programs linking reimbursement to quality?
  - A. Invest in fewer resources.
  - B. Avoid use of electronic documentation.
  - C. Take steps to increase percentage of patients who respond well to care interventions.
  - D. Lobby for additional resources.
14. Which of the following is an expected outcome of the Patient Safety and Quality Improvement Act of 2005?
  - A. decreased reporting of adverse outcomes
  - B. increased malpractice litigation
  - C. increased voluntary reporting of errors
  - D. legal repercussions against clinicians reporting errors
15. When researchers looked at Medicare inpatients undergoing major surgery, which was a key finding?
  - A. Almost all patients received antibiotics within one hour of incision.
  - B. Most patients received incorrect antibiotics.
  - C. Surgical infections resulted mainly from giving patients the wrong antibiotic.
  - D. Less than half of patients had antibiotics discontinued within 24 hours of surgery.
16. During a JCAHO survey at Fort Sanders Sevier Medical Center, what did surveyors recommend?
  - A. taking action on problems identified
  - B. allowing nurses to use discretion for medication orders
  - C. using written communication only when patients are transferred
  - D. avoiding formal guidelines for medication orders, except for severe pain

**Answer Key: 13. D; 14. C; 15. D; 16. A**

## CE instructions

**N**urses 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 **December** 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. ■

influence the strength of the evidence sought. For example, you might want a more rigorous evaluation process if the result of the evaluation has larger resource or policy implications for the organization. Several quasi-experimental strategies that can be used to assess the effectiveness of performance improvement interventions are described below:

- **Use a control group.**

This strategy mimics a simple experimental design with one important difference: Participants are not randomly assigned. For instance, an intervention might be implemented in one nursing unit but not another. The other nursing units act as nonrandomized control groups by not receiving the intervention. This method of effectiveness evaluation can be invalid if the intervention and control groups differ significantly and these differences influence the measures used to determine an intervention effect. In the example involving nursing units, the different characteristics of the intervention unit (e.g., pediatric population only, short-stay patients, only, etc.) could result in invalid comparisons among units.

Another way to use control groups is to apply different implementation strategies in each group. The goal is to determine which strategy works the best. For example, one hospital implemented a process for reconciling patients' medications at discharge. In one nursing unit, staff received an educational session on the new process after which the steps in the process were posted at the nursing station. In another unit, only the steps of the process were posted; the nursing staff did not receive any formal training. Compliance with the new process was then measured, and the two implementation strategies compared. Much to the surprise of the reviewers, both strategies yielded almost equal compliance with the medication reconciliation process. The step of staff training was eliminated when the process was introduced in other units.

- **Take more measurements.**

Consider using a simple time series measurement strategy. Establish a baseline by taking several measurements before implementing the intervention. Next, take the same measurements after introducing the intervention.

If the intervention was effective, one would

expect to find a difference in measures between the two time trends. The number of measurements needed for a time series evaluation depends on the amount of random fluctuation (noise) that may occur in the process or outcome being measured and how much of an impact the intervention is expected to have. Typically, somewhere between six to 15 measurements are needed to establish a baseline and the same number to establish the trend after the intervention is implemented.

A time series evaluation is suitable only for some situations. For example, it would take quite a long time to gather reliable data on the incidence of unmarked surgical sites (an infrequent occurrence). It probably would be better to measure compliance with pre-incision timeout procedures. This would permit more frequent and reliable measurement. Another option is to combine the control group measurement approach with a time series evaluation to strengthen before-and-after intervention reviews.

- **Stagger implementation.**

With this measurement strategy, all affected groups eventually implement the intervention, but at different times. As a result, all groups also serve as a comparison group to each other. The advantage of this implementation and measurement technique is that it markedly reduces the chance of mere coincidence. For instance, when all nursing units make a change in a process at the same time, you can never really be sure that something didn't coincidentally occur at the same time to influence the measured results. Another influencing factor that can subtly impact measurement results is the Hawthorne effect. That is, everyone's attention is focused on correcting the problem and it is this "focused attention" that actually causes improvements, not the process change itself. Once people's attention turns to other priorities, the gains can slowly slip away.

When implementation of interventions is staggered, the possible influencing factors also are staggered — reducing the likelihood that mere coincidence or focused attention are influencing the measurement results. Staggered implementation of interventions also can allow interim assessments and, if appropriate, modification of the

## COMING IN FUTURE MONTHS

■ Monitoring improvements in handoff communication

■ Avoid problems with core measure data collection

■ Use of quality software to track adverse outcomes

■ Identify improvements with AHRQ's survey tool

■ How to obtain quality resources from administrators

intervention or its implementation before it is introduced in other areas.

- **Measure multiple outcomes.**

It is important to measure more than one type of outcome following implementation of improvement actions. This increases the strength of the evaluation. There can be a number of outcomes intervening between the start of the plan implementation and the final outcome. It is ideal to try to measure as many of these different intervention outcomes as feasible. This includes measurement of completion of action plans, as well as short- and intermediate-term effects of the intervention. In instances where an improvement project failed to achieve goals, you want to be able to distinguish between inherently ineffective action plans and a flawed implementation strategy.

If an action was not completed as intended, measuring effectiveness of the project by measuring overall outcomes likely will underestimate the intervention's potential impact. You might discard the improvement project as being a failure when in fact the culprit was inadequate implementation of one action. First try to improve this part of the intervention instead of discarding the overall plan altogether.

Often what you'll be measuring during the "check" cycle is the effectiveness of the actions at achieving improved outcomes. For example, such an evaluation might answer the question, does the new patient admission assessment instituted six months ago (for the purpose of decreasing decubitus) actually reduce skin ulcers? Although outcomes often are measured in an effectiveness evaluation to determine whether the improvement project has had an effect or not, there are two situations where this might not be the case. At times, outcome data may be unreliable or invalid (e.g., when small numbers are involved because of the size of the facility). In this case, a surrogate measure of effectiveness could be used (e.g., compliance with patient assessment procedures).

The other situation is when the explicit objective of the improvement project is not to improve an outcome but rather to change the process. For example, an improvement project might be done to decrease the use of flash sterilization of instruments in the operating room. Upon completion of this project, the measures of success may focus solely on how often staff members are following the redesigned process. However, even if the purpose of the intervention is to ultimately effect a process change, it may be beneficial to also include a measure of outcome. ■

## EDITORIAL ADVISORY BOARD

### Consulting Editor

**Patrice Spath, RHIT**

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

### Kay Ball

RN, MSA, CNOR, FAAN  
Perioperative Consultant/  
Educator, K&D Medical  
Lewis Center, OH

**Janet A. Brown, RN, CPHQ**  
JB Quality Solutions Inc.  
Pasadena, CA

### Catherine M. Fay, RN

Director  
Performance Improvement  
Paradise Valley Hospital  
National City, CA

### Judy Homa-Lowry

RN, MS, CPHQ  
President  
Homa-Lowry Healthcare  
Consulting  
Metamora, MI

### Martin D. Merry, MD

Health Care Quality  
Consultant  
Associate Professor  
Health Management  
and Policy  
University of New Hampshire  
Exeter

### Kim Shields, RN, CPHQ

Clinical System Safety  
Specialist  
Abington (PA) Memorial  
Hospital

### Paula Swain

RN, MSN, CPHQ, FNAHQ  
President  
Swain & Associates  
Charlotte, NC

## CE objectives

To earn continuing education (CE) credit for subscribing to *Hospital Peer Review*, CE participants should be able to:

- Identify a particular clinical, legal, or educational issue related to quality improvement and performance outcomes.
- Describe how the issue affects nurses, health care workers, hospitals, or the health care industry in general.
- Cite solutions to the problems associated with those issues based on guidelines from the Joint Commission on Accreditation of Healthcare Organizations or other authorities and/or based on independent recommendations from clinicians at individual institutions. ■

## We've moved!

The on-line home of *Hospital Peer Review* has moved. *HPR* Online now can be found on the newly revamped Thomson American Health Consultants web site. The old address is the same: [www.hpronline.com](http://www.hpronline.com), but the new location offers access to an expanded number of on-line resources all in one place, including the *HPR* archives, helpful links, free subscriber CE testing through TESTweb, and links to other resources for CE testing. Visit your new home on the web today! ■