

HOSPITAL CASE MANAGEMENT™

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

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**AUGUST
1999**

**VOL. 7, NO. 8
(pages 133-148)**

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Case managers reorganize to challenge claims denials

CM departments are front-line troops in hospitals' battle to stay viable

At teaching hospitals across the country, it's make-or-break time for case management departments. Faced with plummeting reimbursement both for Medicare and graduate medical education, administrators are looking to case managers to help stop the red ink — and those who can't produce may find themselves downsized out of a job.

In June, the University of Pennsylvania Health System in Philadelphia reduced its expenses and overhead by cutting 1,100 positions (9% of its work force) because of what it characterized as "increasing financial pressures" in the form of increased claims denials, slow payments by health maintenance organizations, and a 30% reduction in Medicare reimbursement under the Balanced Budget Act of 1997. The system lost \$90 million in FY1998.

And Penn's situation isn't unique. This year alone, Georgetown University Medical Center in Washington, DC, reported losses of \$120 million, and Mount Sinai Hospital in Cleveland, which had been affiliated with Case Western Reserve University, went bankrupt and shed its residency program. Meanwhile, the University of Minnesota, George Washington University, Indiana University, Saint Louis University, and Tulane University have all sold their hospitals for financial reasons.

"It's much more expensive to run an academic medical center," says **Maryellen Reilly**, MS, MT, director of clinical resource management and social work at the University of Pennsylvania Medical Center in Philadelphia. "The process of training new nurses and physicians adds expense to the patient care process. With the advent of the Balanced Budget Act, that funding has been significantly reduced. Without the additional financial support to provide this training, academic medical centers will have to redesign their delivery models in order to survive."

The financial problems experienced by the residency program, coupled with the medical center's reimbursement woes, have already trickled down to the clinical resource management department, whose case management staff was cut by eight positions. The loss of staff has forced

Reilly to explore creative reorganization of the medical center's case management delivery models. "There really isn't a population of patients in the hospital that doesn't need case management," she says. "So we have to continue to do the same amount of work with different people."

Rather than adopt a single care delivery model for all units, Reilly chose a unit-by-unit approach, matching the model with the needs of specific programs. "For example, on psychiatric and rehab units, we have what I call a full case management model," she says. "We have social workers and nurses who are cross-trained in the same role, so that each individual serves a certain number of geographically located patients." The case managers on these units "do everything," including utilization review, quality monitoring, patient and family counseling, and discharge planning.

On more clinically intense units, Reilly employs a utilization review/social work team model. On

other units, teams include a separate utilization review nurse, a discharge planner, and a social worker who together serve a population of patients.

At Georgetown University Medical Center, the case management department also underwent a major restructuring and loss of staff in response to the medical center's financial troubles. Since then, however, administrators have decided to beef up case management, gambling that a strong case management department can help the medical center better navigate its reimbursement problems.

"You can save a few hundred thousand dollars in salaries, but you're going to lose a million dollars in denials."

KEY POINTS

- A combination of diminished reimbursement, decreased funding for residency programs, an epidemic of claims denials, and the skilled nursing crisis has imperiled teaching hospitals across the country. Increasingly, these hospitals are looking to case management departments as potential saviors. In the short term, that could mean more staff and a beefier budget, but if your department can't produce, cuts later on could be drastic.
- The University of Pennsylvania Health System in Philadelphia lost \$90 million in FY1998 and responded by cutting 1,100 positions — 9% of its work force. The case management department lost eight positions and is trying to take up the slack with a massive reorganization of its care delivery system and a rigorous education program designed to reduce claims denials.
- At Georgetown University Medical Center in Washington, DC, however, case management staff and resources have been increased for now. The department is using its newfound prosperity to thoroughly screen all incoming patients for appropriateness of admission, upgrade its discharge planning capabilities, and hire a full-time employee to appeal denied claims.

"The hospital took a close look at what departments play a key role in the reimbursement cycle," says **Nitza Fenwick**, MSN, RN, director of case management at Georgetown. "Our department was identified as key. If we don't have the right numbers [of staff] and resources, then what happens is, you can save a few hundred thousand dollars in salaries, but you're going to lose a million dollars in denials. They had to weigh the facts and ask where they should make an investment and hopefully see a return on that investment." Fenwick adds, however, that if in a year's time it's found that the hospital's losses haven't decreased, then the administration's support for case management could wane once more.

For now, however, Fenwick is pleased that her case management staff has been increased to the point where her department is able to screen 100% of the incoming patient population to make sure they meet criteria for hospitalization and to "proactively work on the discharge planning," she says. The goal is to increase resource utilization up front in an effort to avoid problems down the line.

The department is also considering using its increased budget to implement a software program case managers can use to improve data collection and tracking. The department has also added a utilization review specialist whose primary responsibility is to assist case managers in

Why claims are denied — and how you can fight it

Reduce denials by staying on top of changing regs

With high-volume claims denials threatening to cripple its budget, the University of Pennsylvania Health System in Philadelphia turned to its department of clinical resource management and social work to address the problem.

The first step, says **Maryellen Reilly, MS, MT**, director of the department, was to identify the most common reasons managed care organizations were giving for denying claims. The primary reason was what payers somewhat euphemistically called “delays and inefficiencies,” Reilly says. Often, they cited delays in transfer to a psychiatric or rehabilitation unit, but most commonly the denial resulted from a delay in discharge. These “delays,” however, usually resulted not from inefficiencies but from a disagreement in clinical judgment between the attending physician and the payers.

For example, if a patient undergoes extensive abdominal surgery, the physician wants to be assured that the bowel is functioning prior to discharge. The payers often disagree with the physician’s judgement regarding the

“milestones of bowel function” and deny the last day of the patient’s stay. “In those instances where there is a clinical disagreement, we will always defer to the clinical judgement of our physicians regardless of the payer decision to deny it,” Reilly says.

Other reasons cited by payers include:

- **Administrative denials.**

Each payer has a list of expectations regarding notification time frames for admission and concurrent review, claims formatting, etc. If any of these requirements is not met, the reimbursement for the entire episode of care can be denied.

- **Admissions denials.**

These are cases in which the pater feels that the care could have been provided at a lower level of care and denies reimbursement for the entire stay.

- **Placement denials.**

These denials, which occur at the end of a patient’s stay, often result from a dramatic change in the patient’s condition which prevents the patient from returning home immediately. While the hospital personnel are seeking to identify a facility who can provide the appropriate level of care for the patient, the payer often defines those days as no-acute and reduces or denies reimbursement to the facility for the care provided during that time. ■

examining and appealing as many claims denials as possible.

That’s important, given the devastating effect claims denials have had, particularly at teaching facilities, which often care for high-risk indigent patients. “What we’re finding is that insurance companies will issue a denial by saying the patient should have been in another level of service” instead of acute care, Fenwick says. The problem is that because of diminished reimbursement under the Balanced Budget Act of 1997, skilled nursing facilities in particular are shying away from accepting certain types of patients, making discharge planning extremely difficult in some cases. (See “**Outpatient woes are driving up hospital costs, length of stay,**” *Hospital Case Management*, July 1999, p. 117.) That means hospitals are having to keep some patients longer than expected, increasing the hospital’s cost of providing care. Adding insult to injury, many managed care organizations are denying the last

several days of a patient’s stay “from the point where they felt that person should have been in a different level of care,” Fenwick says.

At Pennsylvania, Reilly and her staff have tackled the problem of high-volume denials head on. The first step was identifying the most common reasons cited for denials. (See related story, above.) Then they developed strategies for dealing with the various types of denials. To that end, they initiated an educational campaign to increase awareness throughout the organization about the impact of denials and how to reduce them.

“We work closely with the payers to keep them abreast of new techniques and technology developed at our facility and the associated implementation costs. We have had to develop contract language to include use of new technology. We are currently struggling with the payers regarding reduction in reimbursement. The payers’ strategy of reimbursing the hospitals at a reduced rate for days that are determined not to be ‘acute’ has

effectively doubled the number of days that are not reimbursed at a full acute per diem rate.” Reilly says hospitals must renegotiate reimbursement rate structures to ensure that the costs of providing care are covered regardless of the payer definition of the care provided.

The problem with reimbursement for skilled care doesn't end with the Medicare program. Reilly reports that, in Philadelphia, managed care plans have reduced reimbursement for some acute care patients to skilled care rates. “The reimbursement is so low that most of the skilled nursing facilities in this area have canceled their skilled contracts with the payers,” she says.

While long-term-care hospitals could provide relief for the skilled nursing crisis, those facilities

have seen their reimbursement structure deteriorate as well — and with such hospitals scheduled for their own Prospective Payment System within the next few years, the outlook isn't good, Reilly says.

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GUEST COLUMN



Here is what you can do to protect patient privacy

Maintain an effective confidentiality policy

By **Patrice Spath, ART**
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Perhaps the most intimate, personal, and sensitive information maintained on people can be found in their health care records. Each day, case managers handle a large quantity of health record data. But consumers are concerned that the privacy of this information is in jeopardy.

Free exchange of information with case managers is a necessary part of patient care, but it is important that data not be inadvertently shared with the wrong people. The U.S. Senate currently is debating several bills aimed at guaranteeing the security and integrity of health data. Be careful you are not breaching patient confidentiality when sharing information with health plans or other providers and when answering family questions. Some of the common situations in which unauthorized data disclosure can occur are listed below:

- **Discussions on patient care units.**

Be careful that conversations with physicians and other caregivers about a patient's conditions are not overheard by the public. Even the patient's family members do not have the right to sensitive

medical information without the patient's consent. Save your patient-specific conversations for private areas. Remember that discussions in the hospital hallways and elevators can be overheard.

- **Case management forms.**

The forms used to gather patient data also could be a source of unauthorized disclosures. If reports containing patient names and diagnoses are left exposed, anyone walking by can find out information they are not privileged to know. If clinical paths are posted by the patient's bedside or outside the patient's hospital room, his or her diagnosis may be inadvertently shared with the public. This can be especially harmful if the patient is

KEY POINTS

- Although the free exchange of information is a necessary part of patient care, it's important to ensure that data aren't inadvertently shared with the wrong people. To avoid inappropriate disclosure, save patient-specific conversations for private areas, not hospital hallways or elevators.
- It's also important to take steps to keep case management forms secure, double-check requests for provider-to-provider faxes, and make sure post-discharge requests for information are routed through the health information management department.
- Case management departments also should have a confidentiality policy that defines how computerized files are maintained to prevent security breaches, how information releases are handled, and other aspects of information management.

Information Security Checklist for Case Management Departments

How many of the following information security protections are in your case management program? If components are missing, make the changes necessary to strengthen your commitment to confidentiality.

Does your case management program have:

- A well-defined information security policy?
- Procedures that reflect the security policy of the department?
- Clearly defined responsibilities for authorizing access to patient information?
- Procedures for protecting information sent via voice mail, e-mail, faxes, cellular phones, and wireless computer systems?
- Access to the most current state and federal statutes governing patient confidentiality and release of information?
- A means to prevent former employees from gaining unauthorized access to information?
- Staff who have received training in the organizationwide and departmental policies for protecting information?
- Periodic confidentiality awareness inservices for employees?
- Computer files that are properly protected against unauthorized access (includes the case management database as well as computer links with other providers, computer-based patient records, and electronic data interchange with payers)?
- Staff members who are familiar with the security features of computerized databases?
- Methods to ensure that staff members are complying with the laws and regulatory requirements covering protection of patient information (e.g., state and federal statutes, requirements of the Health Care Financing Administration and the Joint Commission)?

Source: Patrice Spath, ART, Brown-Spath & Associates, Forest Grove, OR.

seeking treatment for an AIDS-related illness, pregnancy termination, or psychiatric disorder. All forms that contain patient information that might be seen by the public should contain coded diagnoses or be maintained in a protective envelope or other secure environment.

When disposing of worksheets or clinical paths that will not be maintained as a permanent record form, be sure to shred them or tear them in half (at a minimum) before disposing of them. Don't let your wastebaskets become a source of confidential information that can easily be accessed by anyone (hospital staff, the recycling company, or garbage collection workers).

• **Provider-to-provider communications.**

The facsimile machine has greatly enhanced the transfer of patients' medical information from provider to provider. However, it can be a significant source of unauthorized disclosure. When faxing information to other caregivers for legitimate health care purposes, be sure to verify the caller is a bona fide provider. If the provider is unknown to you, confirm the provider's identity in the phone directory or through Directory Assistance. Don't transmit more than is necessary to fulfill the requestor's needs. For example, insurance companies requesting patient diagnoses should not receive a copy of the entire history and physical examination if it contains personal history data unrelated to the patient's current condition.

• **Post-discharge information release.**

After the patient has left the facility, insurance companies, other providers, family members, and the patient herself may request information out of the patient's health records. Ideally, all post-discharge release of information is routed to the health information management department, where employees follow strict disclosure guidelines. However, case managers may be contacted directly for information. While attempting to expedite insurance payment or continuity of care, these caregivers may unintentionally disclose information that should not have been shared without prior consent of the patient.

For example, the insurance company seeking information about a patient's lifestyle, mental health history, use of illegal drugs, or other behavior not widely socially approved may be using the information for some other purpose than processing the current claim. Releasing such private information may result in harm to the patient, e.g., loss of employment or denied insurance. And remember, even diagnosis and procedure codes can easily be translated into descriptions of a patient's lifestyle, mental health and alcohol abuse history, or other socially unacceptable behavior.

It is common for a company's human resource department to telephone case managers to follow up on injured employees. If the employee was not injured on the job, these requests should be

made in writing, with an authorization signed by the patient prior to any release of information. Employers have no right to expect return-to-work dates or other health information about their employees unless the patient's condition was work-related.

- **Computerized data.**

Automated case manager notes should be protected from unauthorized access with password protection or other security measures. Those who have access to the computer files, including clerks or volunteers who may assist with data input, should sign a statement saying they agree to hold the information confidential. Patient-specific reports should be shredded, incinerated, or otherwise destroyed when they are no longer needed.

Case management departments should have a confidentiality policy that defines how their files are maintained to prevent security breaches, how information releases are handled, and other aspects of information management. Listed below are important points to cover in a departmental policy addressing confidentiality of patient health data, according to the Chicago-based American Health Information Management Association (AHIMA):

- screening processes;
- employee awareness;
- physician awareness;
- patient awareness;
- access control;
- handling of sensitive data;
- sabotage and theft;
- electronically transmitted data;
- contractor/vendor agreements;
- disaster recovery.

AHIMA has several publications on confidentiality of health record information that would be useful for case managers when writing their confidentiality policies and procedures. Information about these resources can be found on AHIMA's Web site at www.ahima.org. The Web site also includes a summary of each of the privacy bills now being debated in the U.S. Senate.

The patient information that case managers use every day must be guarded from unintentional disclosure. Unauthorized disclosures can create a risk of liability. While no actual harm may come of confidentiality breaches, the greater concern is loss of patients' trust. Patients and families that overhear inappropriate hallway conversations or see private information left in full view of the public at nursing stations may be skeptical of your promises of high-quality patient care.

Patients must be offered an opportunity to consent to disclosure of sensitive information. In some instances, the blanket consent signed by the patient at the time of hospital admission or when the patient applied for insurance benefits does not cover highly sensitive personal data. Federal laws protect patient information related to alcohol and drug abuse. State laws also may impose additional confidentiality requirements upon records of mental health patients and developmentally disabled patients. For more information about these federal and state laws, contact personnel in your hospital's health information management (medical record) department. ■

Hospital CM and managed care growth link questioned

74% of acute care facilities have CM departments

A new study of hospital-based case management reveals that nearly 74% of all hospitals in the United States now have some form of case management — a high figure, considering the paucity of case management departments only 10 years ago. Interestingly, however, the study's author claims that her data challenge the conventional belief that hospital-based case management has grown in direct response to the expansion of managed care.

Indeed, the study found no significant relationship between case management implementation and the level of managed care penetration in local markets. "This was one of the most surprising findings in terms of prevalence of case management," says the study's author, **Jana Stonestreet**, PhD, RN, chief nursing executive for Methodist Health Care System in San Antonio. "We've said for years that case management is a response to managed care, but the research doesn't support that claim. You could speculate that hospitals are implementing case management due to the anticipated growth of managed care, but it would only be speculation."

Stonestreet mailed questionnaires to the chief nursing executives of 3,648 hospitals nationwide. She used a guide published by the American

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CRITICAL PATH NETWORK™

Improving care for patients having abdominal hysterectomy

By **Rebecca Veltman, RN, MSN**
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Abdominal hysterectomy is the second most frequent surgery for women in the United States, surpassed only by cesareans. Due to increasing constraints on the health care dollar, there has been pressure on hospitals to decrease the length of stay for patients after hysterectomy. It has become a challenge for the health care industry to provide comprehensive patient education and adequate resources within the short length of time the patients are in the hospital. Due to these constraints, the multidisciplinary hysterectomy clinical pathway team at Borgess Medical Center, a 355-bed tertiary care hospital in Kalamazoo, MI, proposed a plan to improve patient education and preparedness for abdominal hysterectomy while addressing the issue of decreasing the length of stay.

Pathways reviewed annually

Borgess Medical Center has had a clinical pathway for abdominal hysterectomy in place since 1994. The clinical pathway has an excellent compliance rate (99%) and is well-supported by the surgeons and staff who care for this patient population. The pathways are reviewed annually by a multidisciplinary team. The review's purpose is to update the care and treatment of patients utilizing the most current practice guidelines and to address internal process improvement efforts.

During the last path review, the team determined that the Abdominal Hysterectomy Path was compliant with the standards of care published in the literature. The outcome measures for the population were satisfactory in the areas of mortality, complication rate, readmission rate, and postoperative infection rate. However, the length of stay for uncomplicated hysterectomy was higher than expected, and managed care insurance companies were challenging the path's length of stay. This was resulting in decreased reimbursement to the hospital due to denied payment.

Initiatives identified

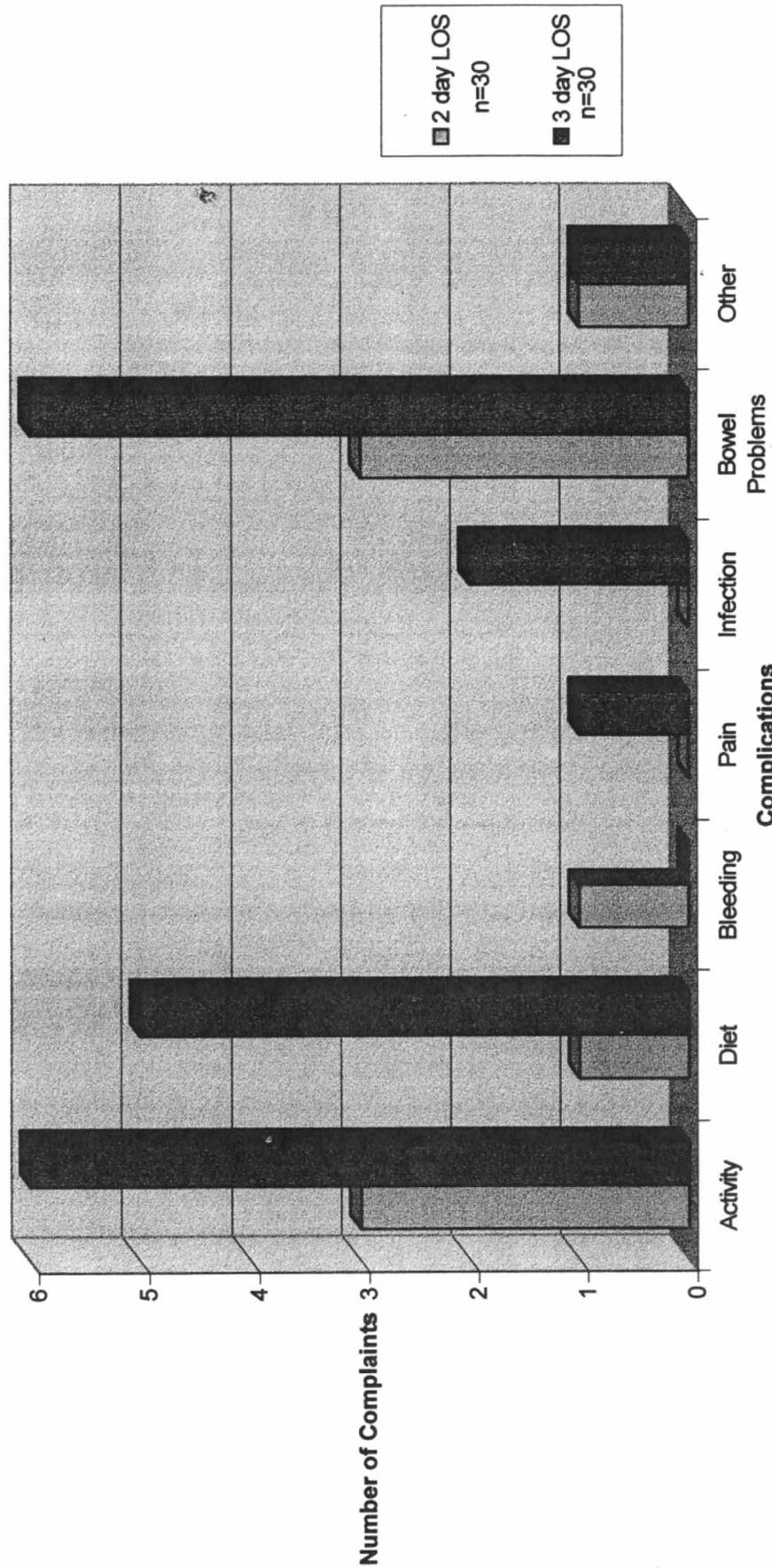
The clinical path team identified several performance improvement initiatives to address the denied days and length of stay. Issues related to physician and insurance regulation changes included:

- a need for physician education regarding the reasons for denied days;
- improved documentation for intensity of service;
- physician understanding of the role of the care manager in acting as a liaison between the physician, the patient, and the insurance company;
- physician awareness of the discharge screens used by the insurance companies.

To address physician education, the clinical path team met with the physicians as a group to discuss utilization problems and concerns. Physicians were reassured that the goal was to send patients home when they were medically ready and that good documentation by the physician would support

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Self-Report of Post-Operative Complications After Abdominal Hysterectomy



p > .05

Source: Borgess Medical Center, Kalamazoo, MI.

Hysterectomy Patient Pathway

	Pre-Surgery	Surgery Day	1st Day After Surgery	2nd Day After Surgery
Tests	<ul style="list-style-type: none"> •Blood tests •You may have a chest x-ray and EKG •Urine test 		<ul style="list-style-type: none"> •Blood tests 	
Treatments & Medications	<ul style="list-style-type: none"> •The nurse will ask you questions about your medical history & check your blood pressure, pulse, respirations, heart rate, height & weight. •An anesthesiologist will discuss your medications before surgery. •Ask your doctor if you should take your regular medications before surgery. 	<p><i>Before surgery</i></p> <ul style="list-style-type: none"> •You will be taken to the surgery holding room by an escort from the patient registration area. You will be given instructions of what to do with your belongings. (Leave valuables at home). •A nurse will start an IV. •You will be assessed by a nurse. <p><i>After surgery</i></p> <ul style="list-style-type: none"> •You will wake up in the recovery room, where you will be checked frequently, and then transferred to a post surgical unit. •You will have a tube in your bladder to drain your urine. •You may have a pain medicine pump (PCA) or you should ask for pain medications as you need them. •Medications are available for gas discomfort and upset stomach. •You may be started on estrogen replacement medication. •Your home medications will be started according to your doctor's orders. •Your nurse will check: <ul style="list-style-type: none"> - your incision - for vaginal discharge - your vital signs (temp, pulse & blood pressure) 	<ul style="list-style-type: none"> •The following will probably be removed: <ul style="list-style-type: none"> - vaginal packing if present - your pain pump - the tube in your bladder - your IV will be capped off if you are tolerating your diet •Ask for pain medication when you need it. •Your nurse will make sure you can urinate normally. •Medications are available for gas discomfort and upset stomach. 	<ul style="list-style-type: none"> •The dressing on your incision will be removed. •Your nurse will continue to monitor your progress. •Medications are available for incision pain, gas discomfort and upset stomach.
Activity	<ul style="list-style-type: none"> •No restrictions. •Get plenty of rest. 	<ul style="list-style-type: none"> •Your nurse will encourage you to cough and deep breath frequently. The nurse will show you how to support your incision. •You will be assisted out of bed. 	<ul style="list-style-type: none"> •Continue to cough and deep breath. •You will be assisted up to the bathroom and may shower. •You will be encouraged to get up in the chair or walk in the hall at least four times a day (this improves bowel functioning). 	<ul style="list-style-type: none"> •You should be up walking as much as possible. •The nurse will encourage you to do as much as possible for yourself in preparation for going home.
Diet	<ul style="list-style-type: none"> •Nothing to eat or drink after midnight the night before surgery. 	<ul style="list-style-type: none"> •If you are not sick to your stomach, you will be given liquids to drink. 	<ul style="list-style-type: none"> •Your diet will be increased to include solid food as tolerated. 	<ul style="list-style-type: none"> •Drink plenty of fluids. Regular diet as tolerated.
Teaching/ Miscellaneous	<ul style="list-style-type: none"> •Your nurse will discuss the following: <ul style="list-style-type: none"> - pain control - cough & deep breathing exercises - activity - your plan of care after surgery - where to go & what to do on your day of surgery • let your nurse know if you will not have assistance at home after surgery 	<ul style="list-style-type: none"> •Your nurse will teach you: <ul style="list-style-type: none"> - how to support your incision when you are moving - coughing and deep breathing exercises •Your nurse will review your plan of care with you and be available for questions. 	<ul style="list-style-type: none"> •This is the time to ask questions about going home. Let your nurse know if you do not have assistance at home. •Your nurse will discuss: <ul style="list-style-type: none"> - activity/driving/lifting - caring for your incision - medications •Ask your nurse and doctor about estrogen replacement therapy if you have questions. 	<ul style="list-style-type: none"> •The nurse will go over appointments for follow up care. •You'll receive phone numbers to call for help, advice or questions.

Source: Borgess Medical Center, Kalamazoo, MI.

the need for an extended length of stay if the patients were deemed not medically ready for discharge. In addition, the care managers worked with physicians on an individual basis to make them aware of denied days and of their ability to facilitate the appropriate return to home with discharge planning interventions. The utilization manager sent prompt letters to the physicians who were acquiring denied days with an explanation for the denial. Also, the discharge screening criteria were placed on the clinical pathway as reference.

Patient pathway development

In addition to physician education, the clinical path committee identified the need for improved preoperative education of the patient. It was determined that preoperative education would help patients move through the system more efficiently. Nursing was convinced that patients needed to be prepared for early ambulation and mobility. Furthermore, nursing believed that discharge planning should be addressed prior to the patient's hospitalization and that patients should be made aware prior to surgery of postoperative limitations and required assistance. With these goals in mind, the team developed the Abdominal Hysterectomy Patient Pathway.

A patient pathway is the patient's guide to the clinical pathway, which is written in easy-to-understand language. The goal is to inform the patient of what she should expect for this type of surgery. The patient is given the pathway in the physician's office or in the pre-surgical testing area, and it is used as a teaching tool. The patient pathway gives a detailed description of the expected preoperative and postoperative care, along with home care instructions. Patients can read through the patient pathway prior to surgery and receive a day-by-day account of what to expect from their caregivers. Issues identified by the clinical path team such as early ambulation and appropriate home planning are addressed in the patient path.

To support the initiation of the Abdominal Hysterectomy Patient Pathway, the clinical nurse specialist provided inservices to the nursing staff in the hospital and in the physicians' offices. The patient pathways were made available to all physicians who performed this surgery at the hospital.

The combined approach of physician education, improved patient education and preparation for surgery, and collaboration with care managers and nursing was an effective plan. The overall cost savings to the institution has totaled over \$30,000 in the last nine months in decreased direct cost per case for abdominal hysterectomy, partly due to the decrease in length of stay. In addition, substantial savings have occurred through the decrease in denied days. During the first five months of 1998, the institution lost revenue of \$20,175 in denials. In the past seven months, the institution has only had one day denied for this surgery. This is a projected cost savings of over \$40,000 per year just in reducing the denied days. Total savings for the year are projected at over \$80,000, including the reduced cost and improved revenue.

Patient feedback

Due to the decreased length of stay, the team decided to evaluate the patients' perceptions of their postoperative recovery period. A convenience sample of 30 patients with a two-day length of stay and 30 patients with a three-day length of stay was obtained. Following discharge to home, the study patients were phone-surveyed by a nurse who asked questions related to problems and/or concerns with diet, activity, pain, bowel problems, and other complications (such as bleeding and infection). The data were analyzed utilizing the chi-square test. The analysis showed that patients discharged at two days were not statistically significant for self-report of complications when compared to patients with a three-day length of stay. There was a trend for patients in the three-day length of stay group to have more complaints of bowel problems, such as constipation; however, this was not statistically significant.

Conclusion

Feedback from the nursing staff on the postoperative unit regarding the patient pathway has been positive. The nurses have noticed an improvement in the patients' knowledge and expectations about their postoperative and home care. Length of stay for uncomplicated abdominal hysterectomy decreased, as did the rate of denied payments from managed care insurance. Patient outcomes, including mortality, readmission rate, complications, and postoperative infection rate have remained within the expected range. ■

(Continued from page 138)

Hospital Association in Chicago to select general medical/surgical hospitals. "I chose the chief nursing executive as the most likely person to be able to answer questions related to the prevalence of case management in [her] hospital," she says.

More than 1,100 chief nursing executives returned Stonestreet's survey, for a response rate of 32.6%. Of the 1,131 respondents, 73.7% said they had case management as defined by Stonestreet's criteria.

Although the study found no relationship between managed care penetration and case management implementation, other factors do appear to have a significant relationship with the prevalence of case management in the acute setting. Those factors are:

- **Bed size.** 49.4% of hospitals with fewer than 50 beds reported having case management, compared with 97.9% for hospitals with 601 or more beds. "It was a stair-step relationship. The more beds the hospitals had, the more likely they were to have case management," Stonestreet notes.

- **Ownership.** 85% of for-profit hospitals reported having case management, compared with 71% of not-for-profit hospitals.

Of the 270 hospitals that reported not yet having case management, 57% reported plans to

implement case management in the next one to 18 months, with five months as the most frequently cited time frame. "There were 31 hospitals who reported that they had implemented case management but discontinued their programs," says Stonestreet. "The most frequently cited reason for discontinuing case management was a lack of physician support."

Other reasons cited for discontinuing case management were inability to continue funding the case management program and inability to recruit qualified case managers.

"About 23% reported that they couldn't find qualified case managers," Stonestreet notes. She also found that for-profit hospitals case-manage a larger percentage of their patients than not-for-profit hospitals do. "I found that on average, nationwide, about 72% of all inpatients are case-managed. In about one-third of hospitals, 100% of patients are being case-managed," she says. "That seems to go against the literature, which suggests case management is most effective when organizations target only their highest-cost, highest-use patients for case management services."

Only 10% of hospitals surveyed reported case-managing patients after discharge or in the outpatient setting. "The most frequent response by far was that hospitals case-manage none of their patients after discharge," she says.

KEY POINTS

- A new study challenges the conventional belief that hospital-based case management has grown in response to increasing managed care penetration. According to the study, conducted by Jana Stonestreet, PhD, RN, chief nursing executive for Methodist Health Care System in San Antonio, there is no significant relationship between case management implementation and the level of managed care penetration in local markets.
- Other factors, however, do seem to have a significant relationship with the prevalence of case management in acute care facilities. These include increasing numbers of hospital beds and for-profit ownership.
- According to the study, 74% of acute care facilities currently have case management departments. Of those that don't, 57% plan to implement case management within 18 months.

Case management directors also queried

Stonestreet sent a follow-up survey addressed to the directors of case management of hospitals that reported implementing case management. The second survey included 49 questions related to the structure, process, and outcomes associated with case management in hospitals. She mailed 834 questionnaires, and 376 of them were returned, for a response rate of 45.1%.

Questions asked in the case management director survey include the following:

- What case management structures do you have in place?
- Is case management incorporated with other departments such as social work, or does it stand alone?
- Who is best qualified to do case management? (See related story, p. 144.)
- Who does the case manager report to?
- How are case managers assigned to patients?
- How are patients referred for case management?
- What tools do case managers use?

Who's doing CM in hospitals?

The debate continues to rage over who is best qualified to do case management. Must case managers have bachelor's-level preparation? Must case managers seek certification?

Good data that begin to shed light on those questions now exist on hiring practices for case managers in the acute setting. In her recent study of U.S. hospital case management, **Jana Stonestreet**, PhD, RN, chief nursing executive for Methodist Health Care System in San Antonio, found that nearly every hospital in the United States that has case management hires RNs as case managers.

Of 374 respondents who answered study questions related to case managers' education and other qualifications:

- 99.1% hire RNs as case managers.

- What processes do case managers use?
- What information systems are used to support case management?
- What outcomes have case managers achieved?

Stonestreet plans to publish the data from the case management director survey in the near future. "When I was planning my dissertation, I found gaps in the literature. Most of the published studies reported the case management experience of individual hospitals. I found few studies that describe what exists today across segments of the population, and no studies describing what exists nationwide in acute care case management."

She says she hopes her work will form a foundation for other researchers to build on. "It's as if, in case management, we skipped a preliminary step in the research. We jumped right to outcomes studies because there was administrative pressure to prove the effectiveness of case management," she says. "Yet if you scrutinize the studies in the literature, they don't often describe who the case manager is or precisely what the intervention was. They provide little clear description of the roles and responsibilities of the case manager or the tools used to document their outcomes."

"I see my work as a broad overview of the current status of hospital case management," she says. "I think my high response rate indicates that people are very interested in this area of study."

- 55% hire only RNs as case managers.
- 65% hire RNs regardless of degree preparation.
- 38% also sometimes hire social workers and licensed vocational nurses.
- Several hospitals reported sometimes hiring respiratory therapists and/or information systems professionals as case managers.
- Only two hospitals reported requiring case managers to be certified.
- 28% prefer case managers to be certified but don't require it.
- Of certifications mentioned, the Certified Case Manager (CCM) from the Commission for Case Management Certification in Rolling Meadows, IL, was preferred by the majority of hospitals surveyed.
- 50% hire case managers with three years or less of clinical experience.
- 83% hire case managers with general clinical experience. ■

Another researcher might take a section of my data and focus in on [his or her] own interests. For example, I asked several questions about information systems used for case management. Another researcher may want take those responses and do a more focused study looking at information systems alone." ■

FDA publishes list of Y2K high-risk medical equipment

Do your facility's critical devices check out?

Bracing for the effects of the Y2K computer bug on health care organizations, the Food and Drug Administration (FDA) has developed a list of types of computer-controlled, high-risk medical devices that could result in "potentially serious consequences for the patient" should they fail because of date-related problems.

The agency notes that just because a device type is included on the list doesn't mean that all such devices are necessarily Y2K noncompliant. The FDA says it will use the list to identify devices and manufacturers that would present the most serious

risks to patients if they experienced a Y2K-related failure.

The list includes three types of devices:

- those used in the direct treatment of a patient where device failure could compromise the treatment or could injure the patient;
- those used in the monitoring of vital patient parameters and whose data are immediately necessary for effective treatment;
- those necessary to support or sustain life during treatment or patient care.

The list does not include diagnostic devices the failure of which would not result in immediate harm to the patient, even though the diagnostic information they provide might be unavailable or incorrect.

The list below contains the potentially high-risk device types. Where the generic device type has been classified by FDA, the list includes the section number in Title 21 of the Code of Federal Regulations where the device type is described. For those devices cleared for market through the Premarket Approval application process or which have not yet been classified, no classification regulation number is given.

Classified Devices

(Classification regulation number followed by classification name)

- 862.1345 glucose test system
- 862.2140 centrifugal chemistry analyzer for clinical use
- 862.2150 continuous flow sequential multiple chemistry analyzer for clinical use
- 862.2160 discrete photometric chemistry analyzer for clinical use
- 862.2170 micro chemistry analyzer for clinical use
- 868.1150 indwelling blood carbon dioxide partial pressure (pCO₂) analyzer
- 868.1200 indwelling blood oxygen partial pressure (pO₂) analyzer
- 868.1730 oxygen-uptake computer
- 868.2375 breathing frequency monitor
- 868.2450 lung water monitor
- 868.5160 gas machine for anesthesia or analgesia
- 868.5330 breathing gas mixer
- 868.5400 electroanesthesia apparatus
- 868.5440 portable oxygen generator
- 868.5470 hyperbaric chamber
- 868.5610 membrane lung (for long-term pulmonary support)
- 868.5830 autotransfusion apparatus
- 868.5880 anesthetic vaporizer

- 868.5895 continuous ventilator
- 868.5925 powered emergency ventilator
- 868.5935 external negative pressure ventilator
- 868.5955 intermittent mandatory ventilation attachment
- 870.1025 arrhythmia detector and alarm
- 870.1750 external programmable pacemaker pulse generator
- 870.3535 intra-aortic balloon and control system
- 870.3545 ventricular bypass (assist) device
- 870.3600 external pacemaker pulse generator
- 870.3610 implantable pacemaker pulse generator
- 870.3700 pacemaker programmers
- 870.4220 cardiopulmonary bypass heart-lung machine console
- 870.4320 cardiopulmonary bypass pulsatile flow generator
- 870.4330 cardiopulmonary bypass on-line blood gas monitor
- 870.4360 nonroller-type cardiopulmonary bypass blood pump
- 870.4370 roller-type cardiopulmonary bypass blood pump
- 870.4380 cardiopulmonary bypass pump speed control
- 870.5225 external counter-pulsating device
- 870.5300 dc-defibrillator low energy (including paddles)
- 876.5270 implanted electrical urinary continence device
- 876.5630 peritoneal dialysis system and accessories
- 876.5820 hemodialysis systems and accessories
- 876.5860 high permeability hemodialysis system
- 876.5870 sorbent hemoperfusion system
- 876.5880 isolated kidney perfusion and transport system and accessories
- 880.5130 infant radiant warmer
- 880.5400 neonatal incubator
- 880.5410 neonatal transport incubator
- 880.5725 infusion pump
- 882.5820 implanted cerebellar stimulator
- 882.5830 implanted diaphragmatic/phrenic nerve stimulator
- 882.5840 implanted intracerebral/subcortical stimulator for pain relief
- 882.5850 implanted spinal cord stimulator for bladder evacuation
- 882.5860 implanted neuromuscular stimulator
- 882.5870 implanted peripheral nerve stimulator for pain relief
- 882.5880 implanted spinal cord stimulator for pain relief
- 884.1700 hysteroscopic insufflator

Most hospitals are Y2K-compliant, AHA reports

Hospitals will spend up to \$8.2 billion to be year 2000 (Y2K) compliant, according to a recent survey by the American Hospital Association (AHA) in Chicago.

The survey found that on average, hospitals with:

- 100 beds or less each will spend \$436,000;
- 100 to 300 beds each will spend \$1.2 million;
- 300 to 500 beds each will spend \$3.4 million;
- 500 beds or more each will spend \$8.6

million.

The survey says most of the hospitals' costs to become Y2K-compliant (68%) come from

capital expenditures such as modifying or replacing information systems hardware. The other 32% represent operational expenses such as assigning staff to work on Y2K changes and hiring consultants.

The majority of the nation's hospitals expect to be completely Y2K-compliant by Jan. 1, the survey results show. Although approximately one-third say they won't be completely compliant, systems directly related to patient care will be. Less than 1% of hospitals currently predict possible "adverse effects" on their critical operations.

More than 60% of respondents cited lack of information from suppliers as the No. 1 barrier to achieving total Y2K compliance. For more information, visit the AHA's Web site at www.aha.org. ■

884.1730 laparoscopic insufflator
884.2660 fetal ultrasonic monitor and accessories

The following device classifications include radiation treatment planning systems that are accessories to these device types:

892.5050 medical charged-particle radiation therapy system

892.5300 medical neutron radiation therapy system

892.5700 remote controlled radionuclide-applicator system

892.5750 radionuclide radiation therapy system

892.5900 X-ray radiation therapy system

Post-medical device amendments class iii devices, and devices not yet classified:

Ventilator, high frequency

Cardioconverter, implantable

Defibrillator, automatic implantable cardioverter

Defibrillator, implantable, dual-chamber

Pulse-generator, dual chamber, implantable

Pulse-generator, program module

Pulse-generator, single chamber, sensor driven, implantable

Pulse-generator, single chamber

System, pacing, temporary, acute, internal atrial defibrillation

Automated blood cell and plasma separator for therapeutic purposes

Lipoprotein, low density, removal

Separator for therapeutic purposes, membrane automated blood cell/plasma

Pump, drug administration, closed loop

Pump, infusion, implanted, programmable

Kit, test, alpha-fetoprotein for neural tube defects

Stimulator, cortical, implanted (for pain)

Stimulator, electrical, implanted, for Parkinsonian tremor

Stimulator, sacral nerve, implanted

Stimulator, spinal-cord, totally implanted for pain relief

Stimulator, subcortical, implanted for epilepsy

Device, thermal ablation, endometrial

To find out the compliance status of specific medical devices, as reported by the device manufacturers, visit the following Web address: www.fda.gov/scripts/cdrh/year2000/y2k_search.cfm. To see a list of names and addresses of manufacturers who have registered with the FDA, go to www.fda.gov/scripts/cdrh/cfdocs/cfrl/registra/search.cfm. ■

COMING IN FUTURE MONTHS

■ How to resolve turf battles between case management and nursing

■ What case managers must know about their facility's corporate compliance plan

■ Building an infrastructure for a successful case management program

■ Special report: Ethical issues in hospital-based case management

■ Case studies on winning — and keeping — physician support for case management

NEWS BRIEFS

Nearest hospital may not be best for heart attacks

Patients with chest pain are typically taken by ambulance to the nearest hospital approved to take emergency cases; but your patients are getting the message through the popular press that the hospital closest to their home (or closest to the site of their infarction) may not be the best place to go if they have a heart attack.

Media sources such as *The New York Times* had front-page stories in late May announcing findings of Johns Hopkins University investigators who compared 30-day and one-year mortality rates of 100,000 infarction patients who were treated at 4,000 hospitals — high-volume and low-volume facilities closest to their homes.¹

After investigators adjusted for differences in severity, the patients treated at the lowest-volume hospitals were 17% more likely to die within 30 days after admission than those treated at the high-volume hospitals. High-volume hospitals were those that averaged at least 4.4 heart attack patients a week; low-volume sites treated 1.4 or fewer. Also, the investigators found that the use of aspirin, beta-blockers, and other treatments accounted for about one-third of the survival benefit at the high-volume hospitals. The rest is chalked up to the experience of doctors, nursing staff, and technicians.

Reference

1. Thiemann DR, Coresh J, Oetgen WJ, et al. The association between hospital volume and survival after acute myocardial infarction in elderly patients. *N Engl J Med* 1999; 340:1,640-1,648. ▼

Computers beat out staff

Is drug dosing best left to computers? Maybe, according to British investigators who recently reported that computerized anticoagulant dosing may be more effective than traditional methods, where medical staff decide whether or not doses

should be increased, decreased, or remain unchanged, and the length of time that should elapse before the patient's next visit.¹

The researchers used a computer program that generates dosing schedules and conducted a prospective, multicenter trial involving 285 patients who were all on anticoagulant therapy, either in the first stages of therapy when a maintenance dose is established or in a stable routine of anticoagulation. Participants were randomized to either computerized or traditional anticoagulant dosing for periods of at least three months.

During the first few weeks of the trial, staffers made many of the decisions themselves, owing to mistrust of the computer program. But after a

Hospital Case Management™ (ISSN# 1087-0652), including **Critical Path Network™**, is published monthly by American Health Consultants®, 3525 Piedmont Road, N.E., Building Six, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Periodical postage paid at Atlanta, GA 30304. POSTMASTER: Send address changes to **Hospital Case Management™**, P.O. Box 740059, Atlanta, GA 30374.

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Editorial Questions

For questions or comments, call **Russ Underwood** at (803) 781-5153.

few weeks, they stopped intervening and used only computerized doses to monitor patients. The authors wrote that the program maintained international normalized ratio (INR) control better than the experienced medical staff. Patients randomized to computer dosing spent an average of 63% of treatment days within target INR range, compared with 53% of days among subjects in the traditional-dosing group. The authors speculate that a wider use of computerized dosing could substantially save medical, nursing, and administrative time; and human attention could be concentrated on the few patients who present unusual difficulties for anticoagulant control.

Reference

1. Poller L, et al. Multicentre randomised study of computerised anticoagulant dosage. *Lancet* 1998; 352:1,505-1,509. ▼

Profit margins down, hospital analysis shows

Fourth-quarter 1998 hospital operating margins dropped by 45% compared to the same period in 1997, according to an analysis by HBS International (HBSI), a Bellevue, WA-based health care outcomes management company.

Data used for the analysis came from 437 hospitals that have an extended history of reporting quarterly financial and operational data to HBSI.

For full-year 1998, the profit margins of the reporting hospitals (the majority of which are nonprofit) decreased by 24% from the year before, said **Greg Bennett**, president and CEO of HBSI, in a prepared statement. HBSI's analysis also showed that 27% of the hospitals had negative operating margins in the fourth quarter of 1998.

The nation's largest hospitals experienced the most sizable declines. Fourth-quarter operating margins for hospitals with 300 or more beds dropped 51% compared to the same period in 1997, while hospitals with 100 to 299 beds showed a 45% decline and hospitals with 99 or fewer beds had a decline of 31%.

The area showing the greatest decline was the Southeast Central region (Alabama, Kentucky, Mississippi, and Tennessee), with the average

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margin plummeting 117% — from 3.77% in fourth quarter 1997 to -0.66% in the fourth quarter of 1998.

The downward trend in margins was consistent across all regions with the exception of the South Atlantic region (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia), which showed a slight increase of 3.4%. ■

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. ■