HOSPITAL CASE MANAGEMENT™

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

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IN THIS ISSUE

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Avoid overload: Assign cases based on workload, model, and role functions

Many factors affect what case managers can handle

Case management directors struggle daily with how best to assign caseloads to their staff, but it's not enough to rely on benchmarks of caseload statistics. Many other factors can affect how many patients a case manager can manage adequately, experts say.

The caseload your case managers can handle depends on the case management model your hospital uses, the role functions your case managers are expected to assume, and the case management workload, says **Toni Cesta**, PhD, RN, FAAN, vice president of patient flow optimization at North Shore-Long Island (NY) Jewish Health System. "It's common sense: The more role functions you give [staff], the fewer patients they are going to be able to handle. The issue is balancing workload and caseload," she says.

The caseload, of course, refers to the number of patients a case manager manages. The workload refers to the volume of work for the case manager and is affected by a number of factors, including intensity of service needed, staffing patterns, complexity of patients, average lengths of stay, payer mix, role functions, model design, and availability of technology, Cesta adds. **(For details on factors that affect workload, see chart, p. 100.)**

HCM to sponsor CCM certification prep course

On August 20, *Hospital Case Management* newsletter will sponsor a one-day preparation course for case managers planning to take the Certified Case Manager examination. Taught by case management expert **Sandra Lowery**, RN, BSN, CRRN, CCM, CNLCP, president of CCMI Associates Inc., the eight-hour course will be held in Atlanta on the campus of Saint Joseph's Hospital from 8 a.m. to 5 p.m. Register by July 29 to receive a $50 discount off the regular price of $249. For information, contact Thomson American Health Consultants customer service at (800) 688-2421. ■

"Inappropriate staffing ratios are probably the No. 1 reason why departments don't function as well as they should. Effective staffing has everything to do with the type of model and the role functions of the case managers," she points out.

Case management directors need to look at staffing in a systematic way to determine how many patients each case manager can handle adequately, suggests **Teresa Fugate**, RN, BBA, CPHQ, CCM, manager at Pershing, Yoakley & Associates, a Knoxville, TN-based health care consulting firm. "On some floors, one case manager can manage 20 patients without any problems. On another floor where the patients have complicated needs, it may take two case managers who coordinate the care for 10 patients each," she says.

If your department has other people who handle utilization management, the case managers can handle more patients than if they are doing multiple tasks.

"If case managers are doing quality improvement review concurrently or intervening with physicians and the nursing staff to ensure that the care meets standards and indicators, they're going to be able to see fewer patients than someone who concentrates on coordination of care," Fugate notes.

If your case managers do handle utilization review, keep in mind that commercially insured patients take more time because the case managers have to contact the insurers.

"When you look closely at how many things the case managers have to do for a patient, you can get an idea of how many patients they can handle," she says. For instance, coordinating the care of a 90-year-old patient admitted for congestive heart failure who has multiple comorbidities and no support at home may take more time than a 40-year-old patient with complications from surgery who may require just an additional authorization call to the insurance company and no discharge planning.

"A case manager may have 20 patients, but all are Medicare patients with a higher acuity than another case manager's patients who are on the obstetrical floor. In the case of mothers with new babies, case managers may have to certify insurance, but that's all the discharge planning they'll have to do," Fugate says.

To determine what your staffing ratios should be, start by thoroughly evaluating the role and activities of your RN case managers and social workers to discover where their time is being spent, suggests **Patrice L. Spath**, BA, RHIT, health care quality specialist with Brown-Spath & Associates, based in Forest Grove, OR.

She also recommends conducting a work analysis study to determine if what they are doing is contributing to more efficient use of resources and patient flow. List the major functions now expected

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Editorial Questions

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of case managers and ask them to keep a record of the time spent on these functions each day, Spath adds.

"This work analysis can also help the case management manager determine whether staff are performing tasks that are duplicative of work done by other people or if staff are performing activities that should be the responsibility of the nurses, unit assistants, other caregivers, or clerical support staff," she says. "The most important component of the work analysis study is asking, "Why are we doing what we are doing?"

In an ideal situation, the case manager spends the majority of his or her time actively coordinating care for patients who need intensive case management services, working with physicians and other caregivers to reduce unnecessary resource use, and evaluating the appropriateness of admission and continued stays, she says.

Use the results of the work analysis to determine the priority activities for case managers and what functions could be eliminated or assumed by other caregivers or staff members, Spath advises.

Fugate suggests CM directors take the workload analysis a step further and assign case managers according to the acuity of the patients they manage, with caseload numbers that may shift over time. "Case managers' daily assignments should be based on the time it will take to manage the care of their continuing patients plus the new ones," she says.

Fugate recommends conducting the time studies for a two-week period. List all the case management tasks on a sheet of paper, get each case manager to tick off each task they complete, and write down the time it takes.

Calculate the average time for each task by the day, week, and period of the time study to come up with an overall average of how long it should take to complete each task.

"We've found that there is a natural sequence. Every time we go into a hospital, the average of each activity is around the same," Fugate explains. For instance, a new review takes an average of 20 minutes. A continued stay review takes an average of 10 to 15 minutes. Use the overall averages to determine caseload assignments on a daily basis, she suggests.

Each morning, the person who makes case management assignments should look at the demographics of new patients, determine how much time each is likely to take, and assign patients accordingly. At lunchtime, the supervisor should look to see if the time it is taking for each patient is close to the anticipated time and make adjustments if necessary.

At the end of the day, case managers should anticipate what they have to do the next day and enter it into a simple data-entry system the person making the assignments can use the next day.

"The model looks at the number of activities a case manager is responsible for and the expertise and time they each take," Fugate says.

In facilities where there are case management specialists, such as cardiology or med-surg, case management directors can use the acuity system each day to determine what staff they need in each unit. For instance, if the caseload is low in cardiology, the case manager should be knowledgeable about the care of med-surg patients and be able to fill in on the med-surg unit.

"Case managers should be cross-trained. Case managers have to be cross-trained to fill in when their colleagues are sick or on vacation, so why not on a daily basis," she says.

An acuity system can help spread the work equally, taking into account what the case managers do and the needs of their patients.

For instance, a high Medicaid population means the patients are likely to have a lot of social service needs. If your RN case managers handle that function, they should take on a smaller caseload than case managers who collaborate with social workers.

Use the information you gather from your work analysis studies to justify staffing needs to management, Cesta suggests.

Quantify the time it takes to do some of the difficult tasks and calculate how many of the tasks a case manager can do in an average day and use the data to demonstrate to administration that to complete all the case management functions in eight hours, you need a certain number of case managers for your hospital's average daily census.

Hospital administrators who have never worked in the field may not understand that one difficult discharge plan can take a case manager as long as half a day, Cesta adds. "What many administrators don't understand is the relationship between a good case management department and the hospital's bottom line. They don't understand that if they invest up front, they will get that link on the bottom line," she says.

Consider linking your staffing ratios to outcomes. If your denials are up and your length of stay is up, that may indicate there are not enough case managers to do the work.

"Showing a correlation between missing staff

and outcomes is very powerful," Cesta adds.

As hospitals get a handle on their length of stay potential, staff are caring for sicker patients and sending them home sooner, which means the case management department is handling an increasingly complicated patient population and may need additional staff to accommodate their discharge planning needs, she says.

CM directors should suggest to the administration that the department conduct a pilot project that implements appropriate staffing ratios in one unit and show the outcomes for that unit, compared to one where you are short-staffed.

There are a number of simple approaches to justifying the number of staff you need to your administration. Using national ratios is the simplest, but it may not work the best because of different case management models and caseloads, Cesta points out.

There's no right model for a hospital case management department, Spath says. "I've seen some hospitals change their models every two to three years trying to get it right only to return to a previously used model a few years later."

The most effective case management model is one in which the role, responsibilities, and performance expectations are defined clearly and staff are held accountable for meeting expectations, Spath says, adding "without these elements, any model will be ineffective.

"Case managers must have enough information to understand the proper contexts of their job tasks. Otherwise, they will not be able to prioritize work activities or refine job duties to meet current demands," she says.

Depending on the case management workload **(see chart, at right)**, a target caseload for a case manager in an integrated case management model should be 1-to-20. In the same model with the social worker as a collaborator, the target caseload for the social worker should be 1-to-17, Cesta says.

In an integrated model, all functions are performed by a single case manager, combining all previously disconnected functions. They include clinical coordination/facilitation, utilization management, transitional planning, variance tracking, and quality management.

A rule of thumb in an integrated model is all patients should be followed by a case manager, and approximately 40% of patients should be followed by a social worker, she adds.

Other staff in an integrated model should include clerical support staff for case managers and secretarial staff for case management and social work, along with one discharge planning specialist and two audit and appeal specialists, Cesta says.

Behind-the-scenes clerical support staff can free up case managers to see more patients. She recommends one clerical staff member for every six case managers. "Models and role functions are the main factors that affect staffing because there are only so many hours in the day."

If the work analysis reveals that RN case

Factors That Affect Case Managers' Workloads

1. **Role function**. The more role functions you give hospital case managers, the fewer patients they can handle. Typical roles for a case manager include coordination and facilitation of care, discharge planning, utilization management, identification of variances, tracking quality indicators, DRG/documentation assurance.
2. **Model design.** How collaborative is your model? This depends on the roles of all other members of the interdisciplinary team. The more collaborative the model, the more role functions a case manager can handle.
3. **Payer mix.** A case manager in a heavily managed care environment who has to communicate with many insurance companies may not be able to manage as many patients as one who works with other types of payers.
4. **Intensity of service.** Case managers in tertiary care hospitals tend to handle more complicated cases than those in a community hospital.
5. **Complexity of the patients.** Uninsured patients often have psychological issues, financial issues, and clinical issues. That factor makes the case management process more complex and, therefore, more time-consuming.
6. **Length of stay of the patients.** Shortened length of stay increases the workload for case managers who have to get the patients in and out quickly.
7. **Staffing patterns.** If your case management department does not provide service during the weekends and on holidays, the case managers have to catch up when they come back on Monday morning or after a holiday, thus increasing their workload.
8. **Use of technology.** Once you're past the learning curve, case management software can save your staff time by automating parts of the case management process.

Source: Toni Cesta, PhD, RN, FAAN, Great Neck, NY.

managers and social workers are spending a lot of time on clerical duties, look for ways to allocate these tasks to other people.

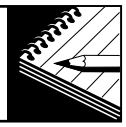
Spath advises CM directors to considering hiring someone with a health information management background, rather than just adding clerical support. "This person can provide some clerical support. However, they can also help manage and analyze all the information that is coming into and going out of the department," she adds.

In the absence of additional staffing, work to get your staff more technology. Cesta suggests purchasing a case management software program, and providing personal computers, beepers, and access to fax machines and copiers for all staff members.

Using timesaving technology to contact insurers increases the time case managers have for their patients, Fugate says. Examples include Internet-based certification programs and automated voice-based communications systems.

"This technology dramatically decreases wait time, but it doesn't do any good unless the insurance companies use it as well," she adds. ■

GUEST COLUMN



Internet resources help you study for CCM exam

Guide gives overview of exam, sample questions

By **Hussein Tahan**, DNSc, RN, CNA
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Commissioners with the Commission for Case Manager Certification (CCMC) frequently are asked in many forums, such as conferences, how applicants can study and prepare for the Certified Case Manager (CCM) certification exam.

Unfortunately, that question cannot be answered directly by the commissioners due to conflict-of-interest issues. As an independent, nationally accredited organization, the CCMC cannot provide or endorse any materials such as texts or courses that are aimed specifically at helping people prepare for the CCM certification exam.

The CCMC's policies are governed by the fact that it is the oldest and largest case management certification organization to be accredited by the National Commission for Certifying Agencies.

Nonetheless, the CCMC provides resources on its web site (www.ccmcertification.org) that are useful for case managers who wish to become certified. Some of these resources also are of great value for other certified case managers. These resources include:

- CCM Certification Guide
- Glossary of Terms

For those wishing to become certified case managers, the first step is the CCM Certification Guide. The guide, which can be downloaded free from the CCMC web site (www.ccmcertification.org — see "Apply for Certification"), provides useful information, from an overview of the certification process to sample exam questions and a suggested reading list. The suggested reading list is not comprehensive; however, it provides candidates for the CCM exam direction as to where to start their review.

The guide explains the application process, including a description of the role of licensure or certification, work eligibility criteria, and the exam schedule. The guide also features a one-page questionnaire aimed at helping applicants determine whether their work experience is acceptable for CCM certification. It is worth noting that the CCM certification is broad-based and relevant in a variety of work settings. This wide recognition and portability is useful to case managers who frequently move from one practice setting to another.

The content of the certification exam is broadly outlined in the guide. The guide describes the six knowledge domains addressed in the exam. These were identified based on rigorous research in the practice of case management. The guide also indicates the percentage and number of questions that appear on the exam reflective of each domain. The domains (listed in order of mean importance rating) are: Processes and Relationships, Healthcare Management, Community Resources and Support, Service Delivery, Psychosocial Intervention, and Rehabilitation Case Management.

Each identified domain represents knowledge areas that are needed by case managers to perform the activities and functions typically associated with case management (i.e., assessment, planning, implementation, coordination,

monitoring, evaluation, and advocacy).

The guide includes a description of each knowledge domain as well as subsets within the domain. For example, the guide states: Processes and Relationships "emphasizes knowledge of communication skills and interpersonal relationship skills. The domain requires knowledge of methods of communication necessary to facilitate outcomes, which are in the client's best interest." Areas of preparation within this domain are listed in the guide as: case recording and documentation, clinical problem solving, critical thinking skills, case management process and tools, interviewing skills, negotiation skills, and conflict resolution strategies.

The CCMC provides another resource on its web site, which is helpful for those preparing for the CCM certification exam, as well as for already certified case managers: the on-line Glossary of Terms. This 31-page downloadable document contains more than 300 terms related to the practice of case management. The glossary is divided into several sections/clusters, including: community, disability, health and human services, insurance, legal and law, medical, rehabilitation, return to work, and miscellaneous. The glossary is not intended to be a definitive list but rather a compilation of frequently used terms in various areas of case management practice.

The glossary covers the breadth of practice areas within case management such as acute care setting, rehabilitation counseling, social work, managed care organizations, and so on. Case managers who have expertise in one area may use the glossary as a guide to understand common terms and concepts they should be aware of but happen to be outside their primary orientation/work setting. Examples from the Glossary of Terms include these listed here:

- **Health and Human Services**
  - *Assessment:* The process of collecting in-depth information about a person's situation and functioning to identify individual needs in order to develop a comprehensive case management plan that will address those needs. In addition to direct client contact, information should be gathered from other relevant sources (patient/client, professional caregivers, nonprofessional caregivers, employers, health records, educational/military records, etc.).
- **Insurance**
  - *Network Model HMO:* This is the fastest growing form of managed care. The plan contracts with a variety of groups of physicians and other providers in a network of care with organized referral patterns. Networks allow providers to practice outside the HMO.
- **Medical**
  - *Comorbidity:* A pre-existing condition (usually chronic) that, because of its presence with a specific condition, causes an increase in the hospital length of stay by about one day in 75% of the patients.
- **Miscellaneous**
  - *Life Care Plan:* A dynamic document based upon published standards of practice, comprehensive assessment, research, and data analysis, which provides an organized, concise plan for current and future needs with associated costs for individuals who have experienced catastrophic injury or have chronic health care needs.
  - *Assistive Device:* Any tool that is designed, made, or adapted to assist a person to perform a particular task.

The glossary was an in-depth undertaking by members of the CCMC's Exam and Research Committee in collaboration with the other CCMC commissioners. Each of the commissioners, as an expert in a specific case management practice setting/professional discipline, researched her/his associated field and selected the terms and phrases she/he thought must be included in the glossary. Some of the terms were based on a literature review; others were based on the personal thoughts and the expertise of the individual commissioner. The compiled list of terms was then given to all commissioners for review.

Commissioners were asked to provide specific feedback about the glossary that included agreement with the definitions, inclusion in the glossary, required additions, edits, and revisions. The outcome was the glossary currently available online. The compilation of the glossary complements the CCMC's commitment to remaining current and relevant to the practice of case management in its varied fields. CCMC's Exam and Research Committee intends to review the glossary on an ongoing basis and modify it as deemed necessary.

The CCMC takes pride in its certification exam, which is administered twice annually, once in the spring and once in the fall. The exam is based on rigorous and ongoing scientific study.

To date, the examination process has been used to certify nearly 30,000 case managers since the

(Continued on page 111)

CRITICAL PATH NETWORK™

Proactive case management initiatives help cut LOS

Technology, education, support staff contribute

When the case management department at University of Wisconsin Hospitals and Clinics implemented a series of initiatives to improve the throughput of patients, the average length of stay for surgical patients dropped from 7.9 days to 4.6 days and overall length of stay dropped from 6.3 days to 5.1 days including all the outliers.

"We knew that we needed to turn around the patient stay more quickly. On any given day, we weren't getting patients out quickly enough and sometimes, we had to turn away patients because there were not enough beds," says **Barbara Liegel**, RN, MSN, director of coordinated care for the Madison, WI, hospital. Her department includes case management, social work, utilization review, and discharge planning.

The hospital, part of an academic medical center, has had case management since the 1990s, but until recently, the case managers concentrated on discharge planning rather than proactive management of patient care, Liegel says. "We changed to a model targeting length of stay and looking at the potential level of care."

The hospital developed a physician advisor role to help physicians understand the importance of moving patients through the continuum and implemented a long-stay management committee that meets weekly to look at ways to facilitate patient discharge.

The support staff who handle referrals and payer contacts were moved to a centralized resource center away from the hospital.

The key to the improvement in patient throughput is the implementation of an automated case management system, Liegel adds.

The hospital uses Canopy Systems case management system, Interqual tools from McKesson, and the Extended Care Information Network (ECIN) for post-acute referrals.

Capacity issues and a goal of supporting better throughput of patients were the impetus for purchasing the case management system.

"It's bigger than just an automated system. We have buy-in from senior management to provide support to our physician group and to influence the way they practice," she says.

When case managers report for work, they pull their patient census off the computer and begin to see patients. They complete clinical reviews or utilization reviews and assess the patients to see where they are in the continuum and where they need to be in the next few days.

They round daily or every other day on discharge rounds with the physicians, occupational therapists, or physician therapists. The case managers have wireless laptops, enabling them to do their clinical assessments and access any information they may need on the floor.

"Before we had the computerized system, we would get a list of patients and start going to see the patients with no clear-cut idea of whether the patient was in the hospital for the first time or had been readmitted. Everything was handwritten and put in the chart. If I picked up someone's caseload, I had to go through the entire chart looking for notes and a plan of discharge," explains **Sheilah Fields**, RN, BSN, MBA, outcomes manager for surgery, oncology, patients at the department of corrections' facilities, and interventional radiology.

In the past, case managers kept a lot of information in their heads until they had time to document it in the chart. If someone was sick or on vacation, their colleagues had a hard time taking

care of the patients' needs, Liegel adds.

"Now all of us in the case management department can manage any patient in the building because we have all the information at our fingertips," she says.

As the hospital implemented the automated case management system, some case managers were worried that they were going to have to spend a lot of time sitting and working on the computer. "Actually, we've been able to see more patients, patient satisfaction has increased, and the length of stay has decreased," Fields says.

At University of Wisconsin Hospitals and Clinics, case managers are assigned to physician services.

"The case managers may have to cross geographic units because not all patients fit on one unit. The physician-based model worked for us. Teaming the case manager directly with physicians on that service has helped us change the physician practices that needed to change to decrease the length of stay," Liegel says. A computerized case management system allows the case managers to track length of stay and outcomes and demonstrate how important it is to move patients through the continuum, she says.

"By measuring outcomes, we can show how we are directly affecting patient stays. It's helped the department to become more of a professional case management team and has given us more influence in the hospital," Fields says.

The case managers have used data generated by the case management system to educate physicians on the importance of meeting Interqual criteria and the need to move patients through the continuum to free up beds and increase capacity. "We have been able to help physicians understand why meeting Interqual criteria is important so we could better serve patients by meeting the length of stay requirements. We helped them understand that payers are looking at Interqual criteria, and that's why we need to remove the Foley catheter on Day 2 and not Day 4," Fields notes.

Now that the surgeons understand that moving patients safely, quickly, and appropriately will increase their ability to treat more patients, they often come to the case managers to see if they can shave a day off the length of stay in some DRGs, she adds.

As the census has increased, the hospital's case mix index acuity level has remained quite high, averaging 1.7 to 1.8. "We continue to get sicker patients and are moving them more quickly. The discharge plan is in the chart and on the intranet so the physician and clinic can find it," Fields adds.

The entire department has gone through quality improvement looking at very specific DRGs or procedures and how they can be done more effectively and efficiently. "Automation helped us set the standard. We couldn't be doing any of the rest of this without an improved way to communicate," Liegel says.

The hospital's long-stay committee includes the chief medical officer, fiscal staff, a representative from administration, the legal department, patient representatives on certain cases, and physician advisers. The case managers choose patients for discussion.

The group meets once a week for an hour and usually tackles eight to 10 new cases during each session as well as reviewing the cases presented the week before.

The group initially targeted patients who had been in the hospital 30 days or longer. In the initial meetings, that group was around 55 patients.

Now that length of stay has dropped and the number of patients in the hospital 30 days or longer has dropped below 20, the group is looking at patients who have been in the hospital 20 days or longer.

"As it has evolved, the staff are comfortable bringing up patients they feel have the potential for a lengthy stay. We're looking at delay issues sooner and not later," she explains.

The fiscal department participates to help support plans of care. For instance, if there is a patient who has no insurance but needs six weeks of bed rest, the fiscal department helps decide whether the staff should keep the patient in the hospital for the six weeks or pay for a stay in a nursing home, freeing up the inpatient bed.

"The staff feel more support because representatives from all parts of the hospital can help solve the issues that crop up in an academic medical center," Liegel notes. Moving the case management support team off-site to a centralized location was another efficiency measure, she says.

The department has been able to decrease the number of support positions by moving them off-site and centralizing them, rather than being on-site and working with the teams, Liegel says.

The Resource Center is staffed by payer specialists and referral specialists who take care of the nonclinical details often assigned to case managers. The payer specialists are assigned by payers and review companies. They make 60 to 70 calls each day, providing information for clinical reviews.

"We evolved an old case manager associate role and centralized it to provide support work for the licensed clinical staff. It has freed up the clinical staff to work within their team rather than making phone calls and faxing, " Liegel adds.

Each clinical practice group is assigned a referral specialist who does work that is delegated by that clinical team. For instance, the referral specialists may be called on to check with a patient' insurance if the patient needs to be discharged with home health and durable medical equipment. The referral specialists check on nursing home availability and arrange transportation. When a patient who lives outside of Madison is being discharged back to his or her hometown and doesn't have a primary care provider, the referral specialists check on what clinics are available.

"A lot of work supports discharge planning. You don't need a licensed professional to do faxing, copying, and telephone work. Much of the work can be done by support people," she says.

Getting buy-in from management for the computer system was not difficult because management realized that it would be a tool to help move patients through the system.

"In the hospital setting, there are a lot of paper processes that are broken," Liegel says. "It comes from years of working in a chaotic environment where sometimes staff has to go where they are urgently needed. In other environments, it's easy to do flowcharts, but it's not like that in our environment." The restructuring and adjustment to a computerized case management system was a challenge for members on the clinical team, she adds.

"We were automating the process for employees who have done something manually for 15 to 20 years and asking them to change their work processes. We have nurse case managers and social workers on the team who were reluctant in the beginning but now realize that their practices can be more efficient and can see more patients than they did in the past," Liegel notes. ■

Work as a team to meet needs of all your patients

Case managers should look beyond assigned unit

Hospital case management should be a team approach, with everyone on the team looking at what needs to be done for the patients and making sure it gets done, says **Judith Martin**, RN, CCM, director of medical management for Regional Medical Center, a division of Trover Foundation, a nonprofit health care organization in Madisonville, KY. "Case managers can't have the attitude that they are responsible only for their assigned unit. The entire team has to look at creative ways to meet the needs of the entire house and must be willing to support one another in meeting those needs," she says.

At Regional Medical Center, case managers and social workers work as a team to meet the needs of hospitalized patients. The hospital, which serves the Western Kentucky area, has an average daily census of 150 to 160 patients. Staff are assigned by unit, with some members rotating between units and filling in when needed.

The case managers handle utilization review, case management, and some discharge planning with the support of social work. Social workers take the lead on the more time-consuming discharge planning cases and those where patients and families may have psychosocial needs.

The members of the case management team come in as early as 6:15 a.m. and stay as late as 5:30 p.m. They are on call weekends and holidays. "It is advantageous to see the physicians as they make their early morning rounds, and on a couple of units, we've found it just as advantageous to attend the morning nursing shift reports," Martin says.

"Case management is not accomplished by just one department. Effective case management comes through the input and collaboration of the entire team." Some units, such as a critical care unit, may or may not require eight hours of a case manager's day. Instead of having down time, those case managers can help on other units with simple tasks that they can complete and easily hand off if they are needed back on their own units, she says.

For instance, the hospital's three medical-surgical units have a census of 28 to 32 per day, which is too much for one case manager to handle on his or her own because of the acuity of patients. The units are covered by 3.3 case management full-time equivalents (FTEs) and 1.7 social worker FTEs. The social workers are shared by the three units.

Each med-surg unit has a full-time case manager with assistance provided by the critical care case manager who helps with more straightforward functions such as utilization review, evaluations for core measures, or Medicare issues. "She's a great liaison because many patients on these units just left the critical care unit the day before," Martin says.

The case managers who float to other departments do so when needed with general expectations as to what is to be accomplished, she says.

For instance, in general, the critical care case manager works on her unit from 8 a.m. to sometime between noon and 1 p.m., then helps out on the med-surg units. She participates in the informal med-surg team meetings, held right after lunch, where the team discusses what is left to do on the unit and divides the remaining workload. The med-surg team also meets at 8:30 a.m. to discuss what needs to be done that day.

"This arrangement allows our case managers who are unit based to work with the social worker to identify who needs case management services the most and who needs the services of a social worker the most," she says.

In cases with complex medical issues, the case manager and social worker partner to make sure the patient has everything he or she needs.

For example, if a young person comes in for abdominal surgery and the surgeon finds metastatic cancer, that clinical course will require some level of case management. The patient and family also will begin dealing with psychosocial and acceptance issues, which require the help of a social worker. Therefore, both disciplines should be involved in the patient's care.

"When someone has a complex medical course, they need a nurse on board, but that does not negate the need for social work. There are many psychosocial issues that come with these kinds of medical diagnoses," she adds.

In other units, the case management and social worker staff are assigned according to the anticipated acuity of the patients. For instance, one RN case manager is assigned to the labor and delivery unit, postpartum/newborn unit, the neonatal intensive care unit (NICU), and the pediatric unit.

"Those populations are more predictable and this case manager can usually take on a higher caseload than those on other units. Our OB/GYN population is fairly predictable from a case management standpoint, and the acuity level in pediatrics and the NICU is fairly consistent," she says.

One full-time RN case manager and one of the social workers assigned primarily to the med/surg unit cover the transitional care unit and the acute rehabilitation unit. This equates to 1.3 worked FTEs. Between the two units, post-acute caseload typically is 20 to 25 but has risen to 27 to 29 in recent months.

"These patients have more predictable needs. They are not so acute when they come to the unit, and they already have a plan of care established. The case manager does a lot of family interaction, discharge planning, and working with the interdisciplinary team," she says.

The hospital has 0.8 of a social work FTE whose time is split between critical care and the NICU, two units where there are likely to be intensive patient needs. This social worker also serves the OB/GYN and pediatrics units.

The CM team looks at ways to facilitate care in units that are high volume and have a high turnover. For instance, when a patient is scheduled for total joint replacement surgery, the case manager starts the discharge planning when the patient comes in for his or her preadmission visit.

The case managers meet the patient and fill out the discharge assessment during the preadmission visit, finding out what resources the patient has at home and what support system is available, and assessing for insurance issues that may arise during the stay when they prepare the patient for discharge.

"The case managers will deal with the medical issues that may arise when the patient is in the hospital, but starting the discharge planning before admission certainly streamlined the process and enhanced the level of patient participation in planning for their care," she says.

The case management team supervisor covers the entire hospital, filling in where needed because of increased volume or acuity, giving support and direction when issues arise, lending support to outpatient areas, and fulfilling leadership responsibilities.

The team members communicate with her whenever they need assistance. For instance, if the critical care case manager is involved in a lengthy family-physician session, the team supervisor finds someone to help with his or her regular duties or handles the task herself. Team members always are available by beeper.

The team supervisor and the social worker who divides her time between critical care and the NICU are on call to help in the emergency department when issues arise.

"They have assisted in many ways. Some assistance has been given, in collaboration with the primary care physician, arranging home health for patients being discharged through the emergency department, finding available beds in psychiatric facilities, or making referrals to chemical dependency treatment centers, and supporting the families of trauma victims and the staff who are caring for them," Martin says. ■

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Project examines why patients don't take meds

New tool measures 'adherence intention'

A pilot project under way at Arnot Ogden Medical Center in Elmira, NY, is assessing how likely patients are to adhere to their prescribed medication regimen, with the ultimate goal of helping them to become more compliant, says **Tina Davis,** RN, MS, CNS, senior director of continuum of care.

The project is based on new guidelines issued in fall 2004 by the Case Management Society of America (CMSA), which the Little Rock, AR-based organization has described as "the first national evidence-based algorithm to assist case managers."

At Arnot Ogden, a student working toward a master's degree in social work is interviewing patients to determine where they fall on a grid that illustrates two categories: medication knowledge and understanding the importance of therapy, and willingness to change behavior, Davis explains. "We have this tool to help identify: Is it a motivation deficit, and why? What are the issues, so we can have a set of interventions to help patients?"

"Patients can have different levels of adherence based on their motivation and knowledge — so someone can have a high knowledge level and a low motivation level," she says, or any other combination of low and high.

A patient who is assessed as being "low" in both motivation and knowledge, Davis adds, will be in Quadrant 1 of the grid, which shows the adherence intention is low. Someone whose knowledge is low and motivation high, is in Quadrant 2, which shows the adherence intention is variable, while one whose knowledge is high and motivation is low is in Quadrant 3, she says, which shows the adherence intention is variable.

"If the person is in Quadrant 4, the knowledge is high and the motivation is high, which shows the adherence intention is high," Davis notes.

The assessment can be done surprisingly quickly, she points out. "We've found that it takes about 15 to 30 minutes, which is not a lot of time. If [the result] will be increased adherence to the medication regimen, it will be time well spent."

The pilot project began the first week of April 2005 and is to continue through August 2005, involving the patients on one nursing unit, Davis says. Those who have just had surgery or who are confused, are excluded, she adds. "Confused people won't provide good data."

Davis says she is very excited at the potential — through use of the CMSA tool — for being able to "put our arms around" an issue with which clinicians have struggled for years.

One of the challenges, she points out, has been that — without the advantage of an evaluation tool — nurses and case managers may not have realized a particular patient would have a problem with medication compliance. "The person might look as if he or she would be adherent.

"Medications are one of the most difficult things to deal with for our patients," she adds. "I think it's going to give us excellent information as nurses to intervene and improve adherence, to be able to identify the actual problems — what we need to help the patient with."

So far, Davis notes, patients interviewed at Arnot Ogden have fallen into all of the quadrants except Quadrant 3, the one that indicates a high level of knowledge with low motivation. "We're waiting to see if that's a pattern as we continue to evaluate patients."

In addition to the tools needed to evaluate patient adherence, the algorithm developed by CMSA includes guided interventions to help address patient adherence needs. Those suggested interventions, Davis says, include such

strategies as patient reminder systems and referrals to home health agencies, which can provide staff to help patients with their medications.

One recommendation, she adds, is to educate patients on the consequences of not adhering to the medication regimen, and to use the "teach-back" method of asking the person to repeat the instructions he or she has been given.

"There can be specific interventions for specific quadrants," Davis notes. "We're not trying to educate the person on everything. If they've scored in a particular quadrant, we know that's where the potential problems are and the interventions to put into place based on the assessment of adherence intention."

The next step for Arnot Ogden, she says, is the meeting of an interdisciplinary team to determine, based on patient scores, the interventions that will be put in place, not only in the hospital, but after the person has been discharged and is back in the community.

That team, Davis adds, will include social workers, case managers, the senior director of nursing, a unit director, staff nurses, and the vice president of medical affairs.

Among other things, she says, the team will look at how to continue the program after the social work student leaves, and at creating a letter that will be sent to physicians as a communication tool to inform them of patients' adherence intention. The idea, Davis adds, is that education efforts can continue in the physician's office.

A potential strategy could be to use the hospital's telephonic nursing program to assist patients who need help with medication adherence, she says.

"The referral would come from the inpatient case manager, who would — based on the adherence score — refer the patient to the telephonic program, which would follow up with a designed intervention once the person is home," Davis notes.

Measuring outcomes

The Case Management Adherence Guidelines, known as CMAG-1 because updates are planned on a regular basis, were developed when CMSA created the Council for Case Management Accountability to identify outcomes that should be measured in case management regardless of setting, explains **Sherry Aliotta**, RN, BSN, CCM, president of CMSA.

"We did a bit of survey and research with our stakeholders — about 150 different organizations representing the health care field," she says.

"Those groups, which included the American Medical Association, the American Hospital Association, and the Joint Commission for the Accreditation of Healthcare Organizations, came up with three things as being the most important outcomes to measure — adherence, coordination of care, and patient empowerment and involvement," Aliotta continues.

At the behest of CMSA, nurses researched the literature on these concepts "to see if we could have any impact on them," she says, "and with adherence, we saw the strongest link. We could measure, we could predict, we could impact, and there was a cost benefit. So we could improve quality of care, cost of care, and patient health status."

Working with a grant from Pfizer, the international pharmaceutical company, Aliotta says, the CMSA researchers identified tools that could help predict the likelihood of adherence — "adherence intention" — to whatever course of treatment was prescribed.

The CMSA model was based on a white paper by the World Health Organization, which outlined "the key factors to be in place to make lasting behavior change," she continues.

"We identified tools that would address each area — education, behavior skills, and motivation — and packaged them into what is now known as CMAG-1," Aliotta explains.

The organization will be working in the fall of 2005 on CMAG-2, she notes, "which will be enhanced with what we've learned from the application of guidelines and newly identified tools and will be more in-depth in certain focuses."

The tool is free and available for download to anyone who is interested. During the first two months after it was introduced in October 2004, there were 22,000 hits on the web site where the information is offered, she says.

Shortly afterward, CMSA began offering half-day training sessions on the guidelines exclusively to its membership, Aliotta says. "We did 39 workshops around the country that were very well attended and received good feedback."

These classes, she adds, eventually will be available to nonmembers.

Another benefit that at present is limited to CMSA members is the CMAG Tracker, a web site created to support the new tool that is both an on-line version of the guidelines and a place where data can be recorded and aggregated to

look at results, Aliotta explains. "It is a database of assessments and interventions that have been done," she adds.

"It is only through actually documenting results that we will have usable outcomes," Aliotta points out, "so it is important for as many CMSA members as possible to investigate this and if possible participate in research. One person said the situation reminded her of the story of the Little Red Hen — everyone wants a piece of bread, but no one wants to do the work. I encourage people to participate."

Future plans include train-the-trainer sessions, whereby those who have been trained as users can sign up to learn how to be trainers, she explains.

Meanwhile, the organization has a research project under way to evaluate the impact of the CMAG-1 that is open to any case manager who wants to participate, Aliotta says, adding that she and CMSA president-elect Susan Rodgers are co-principal investigators for the project.

'A three-legged stool'

Elaborating on the content of the guidelines, Aliotta says that if one thinks of adherence as a three-legged stool, those legs are:

- **Education/knowledge.**

This would include such information as the benefits of any therapy that is prescribed and why it's important to take a certain medication at the same time each day, or to take it with food, she notes. "If you don't understand why [instructions] are important, it's less likely you will carry them out."

- **Motivation.**

This has to do with discovering if a patient has ambivalence about taking his or her medication, and if so, the reason behind it, Aliotta says. "Mine might be thinking it will make me feel bad, and yours might be that it cost $300 a day."

- **Behavioral skills.**

An example here would be placing the medication where you can see it and remember to take it, she notes.

A technique called "motivational interviewing" is a key skill to master for those using the CMSA algorithm, Aliotta says. Motivational interviewing is described on the CMSA web site as a directive, patient-centered method that requires an atmosphere of collaboration between case manager and patient to identify mutually agreeable goals.

In this model, the case manager spends less time giving advice and more time asking questions and providing information requested by the patient.

"It's different than the typical biomedical interaction that people are used to having, but necessary to help [patients] discover their own internal motivation to change," Aliotta notes.

Davis points out that medication administration, particularly how patients will continue their medication regimens at home, is one of the hot topics of the Joint Commission and that the tool may help address that issue.

"If we understand how to affect nonadherence with specific interventions, we may succeed in preventing a number of medication errors," she adds.

"By evaluating all patients and taking a proactive approach, we can address these problems up front, instead of waiting for the patient to come back and finding out after the second or third admission that [medication adherence] is the issue," Davis says. "We're looking forward to being able to roll this out, and possibly give feedback to CMSA about how it works in the field."

[For more information, contact:

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Solutions often found in existing technology

Interdepartmental collaboration key

Collaboration between key hospital departments is crucial to making sure discharge planning starts at the earliest possible point in the patient encounter, and the latest advances in technology certainly can facilitate the necessary interdepartmental communication.

However, there also is much to be said for devising innovative ways to use a hospital's existing technology, points out **Katherine H. Murphy**, CHAM, patient access coordinator for Nebo Systems, an Oakbrook Terrace, IL-based company that specializes in real-time electronic

data processing for the health care industry.

"Verifying benefits accurately and in a timely manner is critical to maximizing discharge planning," she says, "as is communicating this information and creating a path of communication among the departments that interface with patient access — medical records and utilization management. Sometimes, there is a disconnect."

It's important, notes Murphy, a former hospital patient access director, "to take a look and say, 'How can we get our information to the next step in the quickest way?'

"One of the things we created at one of the hospitals where I was access director was an in-house census report that showed financial status," she adds. Prior to that innovation, Murphy notes, "[other departments] would know the patient was there but wouldn't know anything had been done. So we added a column to show that precert had been done."

In another instance underscoring the importance of communication between systems, she points out, access personnel made the initial call notifying the insurance company that the patient had been admitted and took the precert reference number. "Sometimes a patient's account required clinical information and then a handoff," Murphy says, "and communicating that efficiently was important."

The good news was that the departments involved had access to each other's systems, she adds, "so there was harmony there. Utilization management [UM] could access the hospital's admission/discharge/transfer [ADT] system, and financial counseling/verification staff could take a look at documentation in the UM system."

The question, Murphy says, became, "How do we best communicate? A lot of times there was a handoff from access to UM that said, 'Here is our preliminary precert number, but UM needs to call back with clinical information.'"

The challenge came when there was a discrepancy at some point, and comments like, "You never let me know that," or "No, I didn't get that voice mail" were traded back and forth, she adds. "Things fell through the cracks."

The solution that was devised through collaboration between access and UM, and with the help of the on-site information technology department, was simple, cost-effective, and made use of existing technology, Murphy explains. "We created symbols to use in the registration system that would indicate the action that had been taken." Everyone had access to the definition for each symbol, so there was no room for the miscommunication that can occur when someone abbreviates words or uses other shortcuts in language," she adds.

"This was a matter of using the resources we had and creating our own little internal tool, so that there was not a lot of dialogue being keyed in that was subject to interpretation," Murphy points out.

For example, the pound (#) symbol indicated no precertification was required, she says, while the ampersand (&) meant precert was pending clinical information and the insurance company would call UM, or that the call had been transferred to UM. The dollar ($) sign meant precertification was pending clinical information and UM must call the insurance company.

"Using the symbols to communicate with UM allowed for consistency in the format of the message, accurate documentation, and accountability, since the message was stamped with date, time, and user identification," Murphy adds. "We all agreed on, 'Here's what it means; here's how we will use it,' and if something wasn't done, it was easier to pinpoint the breakdown."

For facilities in a position to implement the latest in technology solutions, she notes, there now is software that can interface with the registration system or on a stand-alone basis and will determine up front if patients are charity care or qualify for a financial assistance program.

"The software can determine that the patient qualifies for financial assistance and identify the appropriate [assistance] program," Murphy says. "At the beginning of the admission process, [the screen] is populated with information showing, 'Here's where we are with this patient.'"

That knowledge, when shared with discharge planners, can greatly enhance the efficiency and timeliness of the patient discharge and post-acute placement processes, she adds.

"Certainly, when your patient is being transferred to a different level of care, it's extremely important that you know where they stand financially," Murphy points out. "All of these front-end processes can shorten the discharge process and, potentially, the unnecessary delays that increase length of stay."

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(Continued from page 102)

first certification exam was given in May 1993.

The CCM exam is backed by intensive and ongoing research. It reflects the multidisciplinary nature of the case management field. Development of each iteration of the exam begins with a role and function study of the case management field, typically conducted every five years.

This major research undertaking identifies and describes areas of practice, tasks performed, required skills, and knowledge needed by case managers. Based upon the findings of the study, the CCMC exam content is analyzed to ensure it is valid, reliable, relevant, and up-to-date. (A report on the results of the most recent Case Manager Role and Function Study currently is being finalized and will become the basis of the certification exams in 2006).

The certification exam validation process does not end there. The CCMC Exam and Research Committee reviews the items/questions included in the exam at least biannually. Items are written first by experts in the field of case management during an annual item writing workshop.

Each newly written item then is reviewed for its merit and to assess its relevancy and applicability to the certification exam. It also is examined for its currency; that is, its relationship to the practice of case management. If it passes this review, it then is field-tested during an upcoming examination cycle.

Next the results of each tested item are reviewed by members of the CCMC's Exam and Research Committee. The review includes an examination of the item's statistical performance to measure the ability of the majority of the test takers to answer the item correctly and the relationship between the results of the item and the overall performance of the test takers.

It is worthwhile noting that the content of each item used also is evaluated in terms of its relevancy to current practices. For each item generated, CCMC keeps a hard copy of the reference used to write the item and to support the answer. The copy is maintained for the entire time an item is part of the examination process.

The CCMC Exam and Research Committee, in collaboration with the Commission as a whole, reviews the references used (or to be used) in item generation for currency, credibility, relevance, and rigor. Such ongoing review allows for the recommendation of a reading list pertinent to preparation for the examination.

The CCMC takes pride in its rigorous research activities that ensure that the CCM certification exam is the "gold standard" in the field.

CE *questions*

1. According to Teresa Fugate, over how long a period of time should a work-analysis time study be conducted?
   A. 6 months
   B. 2 weeks
   C. 1 month
   D. 6 weeks
2. According to Toni Cesta, in an integrated case management model, case managers should see 100% of patients and social workers should follow approximately 40% of the patients.
   A. true
   B. false
3. How many knowledge domains are included in the Certified Case Manager certification exam?
   A. 12
   B. 6
   C. 10
   D. 8
4. The University of Wisconsin Hospital's long stay committee examines the cases of patients who have been in the hospital for how long?
   A. 20 days or more
   B. 30 days or more
   C. 10 days or more
   D. 55 days or more
5. What is the average daily census of the med-surg units at Regional Medical Center in Madisonville, KY?
   A. 30-35
   B. 22-26
   C. 28-32
   D. 36-40

Answer key: 1. B; 2. A; 3. B; 4. A; 5. C

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For certified case managers and those who aspire to become certified, the depth of research that backs the certification exam should be a source of pride and accomplishment.

The value of the CCM certification exam is derived from the fact that it is evidence-based, backed by scientifically conducted research, and reflective of current demands and practices of the field. This makes the CCM credential highly desired in the case management field.

Certification also allows case managers to access better job opportunities by achieving an advanced level of competence in their field of practice. This competence is desired across the care continuum, by patients, health care providers and executives, and payers.

There also are indications in the market of a rising number of employers who value case management, evidenced by the number of advertisements for case management jobs that ask for certification in case management — either as a requirement or a preferred condition to employment.

For the case manager seeking to become certified, the integrity of the exam is paramount. As certified case managers recognize, certification speaks volumes about their credentials, experience, and professionalism. Through certification, case managers distinguish themselves by their commitment to continuing education, professional development, and adherence to a strict Code of Professional Conduct as required by CCM certification.

Further, they recognize the importance of certification as a means to set standards in the profession, mainly for the benefit and protection of the consumer.

(Hussein A. Tahan, DNSc, RN, CNA, is the chair of the CCMC, the first and largest case management certifying organization to be accredited by the National Commission for Certifying Agencies.

Tahan also is the director of nursing for cardiovascular services and care coordination at Columbia University Medical Center, New York-Presbyterian Hospital in New York City. Additionally, he is the co-author of The Case Manager's Survival Guide: Winning Strategies for Clinical Practice.

William Downey, PhD, CCM, CRC, is a commissioner and chair of the Exam and Research Committee of the CCMC.

He also teaches rehabilitation counseling and case management at the college of education at the University of Arizona in the department of special education, rehabilitation, and school psychology.) ■

CE objectives

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

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

CE instructions

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