AMERICAN HEALTH CONSULTANTS®

Critical Care MANAGEMENT™

The essential monthly resource for critical care and intensive care managers and administration

February 2000 • Volume 4, Number 2 • Pages 13-24

IN THIS ISSUE

Special Series: Nursing Competencies
Our special three-part series on competency assessment winds up this month with advice for managers on the essential steps that follow the testing phase of an evaluation. Included is a profile of how one provider, Meridian Hospitals in Neptune, NJ, developed an in-house appraisal tool and used it to determine pay increases for some 1,500 RNs and other employees. Our series, which begins on page 19, will help you complete your knowledge to develop your own assessment tool with vital information on how to score and interpret the results of direct written and observational testing.

CCU managers face culture shock amid system changes, job redesign

Are traditional managers becoming obsolete?

Is the ICU manager's role becoming obsolete? There's growing evidence to suggest that it is, according to nursing experts.

At many hospitals, traditional jobs such as staff scheduling and development and unit budgeting — once the purview of the unit manager — are being delegated to others.

Meanwhile, managers are finding themselves moving farther up the management chain into administrative or higher management positions — and once there colliding with culture shock.

Next to the manager's title, you can add the terms fiscal officer, policy-maker, administrator, even strategic planner. And "each of the names would fit," says **Jessica P. Palmer**, RN, MSN, nurse manager of medical, surgical, and critical care services at Duke University Medical Center in Durham, NC.

Drastic role changes hit managers

What used to be a relatively straightforward set of duties for most managers has for many been replaced by broader, more demanding jobs.

Seasoned managers are witnessing an almost complete redesign of their job descriptions, a process that began a few years ago, but is accelerating and affecting nearly every major hospital and nursing department in the country, according to nursing officials.

Managers within critical care, especially, are

In This Issue **continued from page 13**

COMING IN FUTURE ISSUES

■ **Shift staffing:** The latest debate over cross-training to address staff shortages
■ **Managing morale:** Effective ways to redesign your shifts and boost job satisfaction
■ **Safe and better?** How automated drug dispensing can cut your unit's error rate
■ **Family affairs:** Ways to manage unit security controls to prevent family disruptions
■ **Working smarter:** Creating an efficient telemetry unit that won't interfere with nurses

seeing their world turned almost upside down as hospitals carve out new territories for them and consolidate others in the name of cost savings.

As a consequence, some RNs complain that while their salaries have shot up, they've gotten farther away from the day-to-day activity of overseeing nurses and patients. Yet, their days are just as long and in some cases, just as arduous.

"Many of these responsibilities have been taken over by charge nurses and shift supervisors," says Palmer.

Clearly, much more is being expected of managers, says **Linda Urden**, RN, DNS, associate professor of nursing at Indiana University in Indianapolis. "The manager's position, as we've known it, is becoming obsolete."

Today's manager has to have a broad knowledge of business and financial skills. Leadership and administrative acumen are also important while an ability to coordinate across wide sections of the acute care continuum is becoming more common, Urden says.

Providers aim to be lean and mean

Why is this happening now? Hospitals are eliminating middle management positions in an effort to run leaner and meaner, according to Urden. The aim to is operate with fewer levels of bureaucracy.

Meanwhile, job redesign is occurring at all levels partly fueled by concepts, such as team nursing, self-scheduling, and employee empowerment, which are becoming workplace realities.

RNs who can't keep up are likely to be overlooked for advancement, no matter how effective they are as managers, according to **Tim Porter-O'Grady**, RN, PhD, a health care consultant in Atlanta.

And according to some nursing insiders who preferred not be quoted for this article, many seasoned, talented ICU managers are not keeping up. Yet, the need for strong leadership in critical care has at no time been greater, according to experts.

With all the forces pulling at the ICU, "I can't imagine any critical care unit running without a manager in a leadership role," says **Vickie Sheets**, RN, JD, director of policy and credentialing with the National Council of State Boards of Nursing in Chicago.

Part of the problem, according to one recent study, is the uncertainty that surrounds payments for health care. Hospitals, in particular, have been

Outlook: Providers favor versatile, gifted managers

Trend points toward increasing roles

In 1996, the Institute of Medicine (IOM) in Washington, DC, released a report, "Nursing Staff in Hospitals and Nursing Homes: Is It Adequate?"

The report outlined changes that would significantly affect nurses in the future. Among them, the IOM cited an "increasing need for interdisciplinary teamwork" and "changing care-delivery models with nurses taking leadership roles in [their] design and implementation."

Ironically, nurses pursuing administration degrees are decreasing even while nursing graduate school enrollments are steadily growing.[1]

Nurse graduate enrollments rise

Nursing administration majors accounted for only 7.1% in the fall of 1997, compared to 13.6% in the same period in 1994. Meanwhile, 57% of enrollees in nursing graduate programs were nurse practitioners in 1997, while enrollment stood at 36.8% in 1994. However, in the workplace, at least one survey reveals different information. The trend toward future hiring in managerial positions is on the upswing, as revealed by the following statistics:[1]

Roles present in >50% of sample	Currently filled*	Plan to increase*	Plan to decrease*
Supervisor / shift coordinator	83.3	3.4	12.6
Unit charge RN	76.9	8.1	6.1
Nurse manager (2 units)	70.9	9.1	3.0
Nurse manager (1 unit)	55.1	2.7	11.8
Nursing director-specialty units	51.7	3.4	6.1
Roles projected to decrease by >10% of sample			
Supervisor	83.4	3.4	12.3
Nurse manager (1 unit)	55.1	2.7	11.8

* Figures reflect percentage of survey respondents in each category.

Reference

1. Krejci JW. Changing roles in nursing: Perceptions of nurse administrators. *JONA* 1999; 29(3):21-29. ■

altering their operations in a variety of ways to become more competitive.[1]

The change allegedly has had a negative effect on nurses and other staff, leading to uncertainty about their roles and environment, according to researchers.

For nursing departments, especially those in critical and acute care, the two highest cost sectors viewed by payers and administrators, the uncertainty springs from several causes, including:

- almost daily patient census fluctuations and complex medical care requirements;
- staff shortages and other personnel limitations;
- lack of control over professional practices;
- interdependency among medical departments;
- external organizational pressures such as managed care.[1]

Nurses feel frustrated, disconnected

The flux is adversely affecting managers, too, whose roles are undergoing a change as a direct result of those factors, researchers says.

In a recent survey, nine acute care managers were asked about their redesigned leadership roles and the challenges they experienced in implementing innovations (in this case a shift from hospital-focused to patient-focused care).

According to the study, each of the nurses felt frustration, disconnectedness, and inadequacy. They also described difficulty associated with being "the central figure in the eye of the storm."[2]

According to the same study, which was conducted in at Vanderbilt University School of Nursing in Nashville, TN, mid-level managers struggled to keep up with the demands of change. They also wrestled with their recognition that it was important to stay committed to the "uncertain goals of the institution."

The two studies suggest that nurse managers are apt to respond negatively to drastic changes in their environment.

"Managers today feel overwhelmed," says 20-year ICU veteran **Beth Teitelbaum**, RN, manager of cardiac

nursing at Washoe Medical Center in Reno, NV. "They're trying to keep all the tops spinning and [are] having trouble staying ahead."

Worse yet, Teitelbaum says managers are being taken farther and farther away from their traditional place in direct patient care.

Ironically, she adds, while they're being given a larger span of control within the hospital bureaucracy, they're actually losing most of their control.

Why? The reason goes to the heart of the theory that the closer you are to where decisions are turned into action, the lower will be your costs and level of risk. Your outcomes also will be higher and the more sustainable these factors will be, says Porter-O'Grady.

Removing a seasoned manager from the point of service does the reverse. The farther away you get, the less effective you become in a phenomenon first observed in Japanese industrial engineering, adds Porter-O'Grady. "Ownership is a requirement for sustainability."

However on the positive side, allowing nurses to rise to higher positions as directors and administrators within the hospital bureaucracy while keeping their title as managers can be a positive influence, says Urden. "The plus is that as a director, you finally have a greater scope of power to make things happen."

Previous studies have confirmed the importance by nurses and mid-level managers of good communication, high visibility, and committed support among administrators.[3]

According to Urden, the growing ranks of nurses in executive positions can only improve conditions for the bedside staff.

Perhaps, according to Teitelbaum, the issue is semantics. Whether managers are actually moving upward to different jobs or evolving into something else isn't entirely clear. It's not what you call the individual; it's what they do that matters most. In that case, charge nurses and shift supervisors are becoming the unit managers of tomorrow.

But managers clearly are evolving, Palmer says. "The traditional manager may be obsolete. But it's clear that the environment is changing and opening up new opportunities for us, and that's a good thing."

References

1. Geddes N, Salyer J, Mark BA. Nursing in the nineties. *JONA* 1999; 29(5):40-47.

2. Ingersoll GL, Cook J, Fogel S, et al. The effect of patient-focused redesign on mid-level nurse managers' role responsibilities and work environment. *JONA* 1999; 29(5):21-27.

3. Knox S, Irving JA. Nurse manager perception of health-care executive behaviors during organizational change. *JONA* 1997; 27(11):33-39. ■

Technology, quality focus can help cut medical errors

ICUs are particularly vulnerable to errors

Through a combination of technology, continuous quality improvement efforts and more effective collaboration, some hospitals across the country are finding ways to improve care, and in the process, reduce medical errors.

President Clinton announced in December a national drive to reduce medical errors, quoting studies that estimate up to 98,000 Americans die each year as a result of health care mistakes. **(See related story, p. 18.)**

ICUs are particularly vulnerable to errors, in part because their patients are particularly vulnerable to harm. They are sicker, with more complex problems, being treated with combinations of very potent drugs.

"It's an area of high hazard for medications, an area of multiple drugs," says **Hedy Cohen**, RN, BSN, vice president for nursing for the Institute for Safe Medication Practices, a nonprofit organization that educates health care practitioners about adverse drug effects and their prevention. The institute reviews voluntary reports of medication errors submitted by hospitals and other practitioners.

Error prevention flows from QI errors

In the ICU, Cohen says, "We see a lot of pump errors, from multichannel pumps, where you have to label all lines going into patients."

And the squeeze to cut costs can put even more pressure on overworked units, leading to fewer of the backups that nurses once may have taken for granted.

At Henry Ford Hospital in Detroit, medical errors aren't pursued in a vacuum, but as part of efforts to improve the entire process of care in the ICU, says ICU director **Robert Hyzy**, MD. As improvements are made that standardize

procedures and address process-related problems, error prevention is the outcome.

To achieve that, the hospital focuses on three important aspects of care:

1. A closed ICU, in which critical care practitioners call the shots. While a specialist, such as a gastroenterologist, may consult on a patient, the final decisions about care are in the hands of critical care specialists.

2. Collaborative practice, or establishment of a close working relationship among physicians, nursing staff, and the critical care pharmacist. This collaboration takes many forms, including an enhanced rounding team that includes nursing and pharmacy and full participation by all parties in quality improvement efforts.

3. Protocolization of care, in which pathways are developed for all procedures. The goal of the pathways is to decrease practice variation, which in turn can lead to fewer errors.

"The biggest focus is towards standardization of things that can be standardized," says **Kathleen Vollman**, MSN, RN, CCNS, CCRN, clinical nurse specialist for medical critical care. "It's clear in the literature that when you reduce process variation, you reduce the chance of missing things and of error."

Staff perform routine checks

In addition to following pathways, critical care staff perform a number of routine checks to backstop their work, say Vollman and **Veronica Hall**, RN, BSN, MSM, nursing administrative manager in the medical intensive care unit.

The computerized medication record for each patient is reconciled with physician orders every 24 hours. At the end of each shift, nurses do chart checks of all their patients to be sure all orders have been carried out.

"A lot of hospitals do 24-hour chart checks," Vollman explains. "We just moved it up so that each nurse is responsible at the end of their shift to re-review what's been done during their shift, and make sure things haven't fallen through the cracks."

Hall says that when the increased checks were instituted about three years ago, some nurses were skeptical. But when the system began to turn up errors, they realized its value.

"We immediately began catching errors," Hall says. "Most of it was little stuff, but we would show it to the person and say, 'Did you realize you did this?'"

Now, she says, when nurses find errors, they will write themselves up.

Creating an 'empowering environment'

It takes work to establish the type of empowering environment that encourages self-reporting — a major point in the Institute of Medicine's report on medical errors.

"The first ICU I ever worked in, I wrote myself up — that was the culture," Vollman says. "It wasn't punitive. The goal was to figure out how [the error happened]."

To achieve that sort of culture, consistency is important, as well as including nursing staff in the process of improving care.

At Henry Ford, a shared governance program provides the structure to include frontline personnel in decisions.

ICU nurses elect members to sit on hospital-wide practice and education committees. Those who participate are acknowledged through a career ladder and help improve care through their suggestions.

The result is quality improvement that percolates from the bottom up. When nurses called attention to a problem of ICU patients self-extubating, Vollman chaired a committee that looked into the reasons, a committee that included nursing, pharmacy, and a pulmonary fellow.

The result was a change in how patients were sedated to decrease agitation.

Nurses also suggested a two-party identification for matching blood products to patients. One nurse will read and spell the name of the patient, and read the medical record number to a second nurse, who will read it back to ensure accuracy.

Vollman says that the sense of empowerment didn't just make nurses less fearful of self-reporting errors. It convinced them that there was value in collecting the data, if it could be used to improve overall care.

Hall says that value system is passed along to new employees by the seasoned nurses who precept them.

All this takes leadership from nursing administration. Although Hall has the advantage of working within a shared governance program, she says an institutionwide structure isn't necessary to create an empowering environment.

"If I was a nurse manager who didn't have a shared governance structure in place, I'd institute a unit committee to meet monthly on unit issues, practice issues," she says. "Let nurses

make decisions on things they can reasonably have control over," such as scheduling policies or support programs for patients' families.

Improved technology will help

Ultimately, with pressures mounting to keep staffing costs down, clinicians may need the benefits of improved technology to keep ahead of errors.

Some technology already is in place at Henry Ford. Hall describes a narcotics delivery system that requires a password and prompts nurses to count remaining drugs before and after removing a dose for a patient whose identification has been coded in.

Cohen says it's becoming more common for drugs to be administered in standardized concentrations, rather than requiring nurses to mix up batches themselves and risk a calculation error.

Vollman would like to see the technology go even further, to perhaps have computers cueing nurses on all the steps required for a complex procedure, for example.

"The staff of today is so inundated with the amount of data and things they have to remember to provide good care," she says. "It's not that they're a good or bad nurse, it's that they're overwhelmed by all the pieces that they have to put together." ■

Pharmacist on rounds can help reduce errors

IOM report on errors raises concerns

Since December, the Society of Critical Care Medicine's (SCCM) Web site has featured the findings of a landmark study that suggests the importance of having a pharmacist on hand during physician rounds as a way to curb the incidence of medical errors in the ICU.

The study, "Pharmacist Participation on Physician rounds and Adverse Drug Events in the Intensive Care Unit," first appeared in the July 1999 issue of the *Journal of the American Medical Association*. (The study can be retrieved by logging on to the SCCM Web site, www.sccm.org.)

The study has received widespread attention in critical care following an Institute of Medicine (IOM) report on sentinel events released last November and remarks by President Clinton.

According to the IOM report, medical errors are responsible for up to 98,000 patient deaths annually at an estimated cost to the health care industry of as much as $29 billion. The Washington, DC-based agency criticized its findings as "simply unacceptable."

In critical care, the issue has assumed greater urgency in light of rapid pharmaceutical and technological advancements.

ICUs face higher error risk

"There are newer drugs and [more complex] technologies on the scene," asserts **Jeanette Ives Erickson**, RN, MSN, one of the researchers of the pharmacist study. "We need to keep looking for solutions," says Erickson, senior vice president of patient care services at Boston's Massachusetts General Hospital.

The study shows that the presence of a pharmacist during daily rounds helped cut preventable cases of adverse drug events (ADEs) by as much as 66% in the controlled study.

ADEs fell to 3.5 cases per 1,000 patient days from 10.4. During the study period a pharmacist made 366 recommendations related to drug ordering. In 362 of the cases, the recommendations were accepted by a physician.[1]

However, the researchers also noted that in most cases ADEs do not result in life-threatening conditions, and it is also correctable.

"This is a fixable situation," according to **Harold J. Demonaco**, MS, RPh, director of drug therapy management at Mass General and one of the study's co-authors.

However, "hospitals should not sit idly by and wait for someone else to come in and fix things," Demonaco adds.

Demonaco cites additional research, which suggests that computerized medication order entry and careful review of orders by experienced pharmacists, can help curb ADEs.

Initially, hospitals will have to rethink their attitude about pharmacists from the current view of materials manager to full participants in the patient care process, Demonaco tells *Critical Care Management*.

In recent years, there has been a groundswell of concern over the incidence of medical errors. According to reports, the vast majority of incidents are downplayed or go unreported.

Regulatory agencies, the Joint Commission on Accreditation of Healthcare Organizations for

one, have been pressing hospitals to be more forthcoming in reporting medical errors.

The hope has been to learn more about sentinel events by encouraging providers to come forth in a nonpunitive atmosphere, according to Patricia Staten, a Joint Commission official based in Oakbrook Terrace, IL.

(Editor's note: For additional information on ADEs, see CRM, *September 1999, p. 98.)*

Reference

1. Leape LL, Cullen DJ, Clapp MD, et al. Pharmacist participation on physician rounds and adverse drug events in the intensive care unit. *JAMA*. 1999; 282:267-270. ■

Pass/fail system gets high marks for assessments

One provider used scores to set pay raises

There appears to be more to gauging nurse competency than evaluating clinical performance. Apart from meeting regulatory mandates, some hospitals are moving toward tying pay increases to well-defined, measurable bedside skills.

At least one provider, Meridian Hospitals in Neptune, NJ, used this approach to bring parity to its revised pay schedule and differentiate its staff's proficiency levels following a complex merger.

In 1997, the combination of three local institutions resulted in Meridian, a hospital system with 1,500 RNs and 7,000 employees described by officials as "a consolidation among equals."

But as soon as the newly formed entity agreed to grant the performance-based pay, the question arose: What would the compensation be based on? And how would performance be judged?

"That's always where questions arise," observes **Donna Sue Gloe**, RN, EdD, a clinical analyst at St. John's Regional Health Center in Springfield, MO.

Problems lie in scoring assessments

Although St. John's is not affiliated with Meridian, managers there have faced the same challenges when trying to appropriately assess nurse core competencies.

Devising reliable written or observational tools is one thing. But adequately scoring and interpreting test results presents a series of different challenges, nurses say. Here's what some veteran managers advise:

• **Assuming that the assessment tool being used reliably evaluates nurses on key skills, Gloe and other nurse educators advocate a pass/fail system.** "Either you know the skill or you don't," says Gloe, who sits on the advisory board of the Journal for Nurses in Staff Development, a research publication read by nurse educators.

• **In general, a pass/fail system works; but only if the assessment tools and models on which they are based are relevant and intelligently devised**, according to **Pat Nolan**, RN, an education specialist at Genesis Medical Center in Davenport, IA.

• **On written exams, a passing grade tends to be more arbitrarily set than in observational testing.** But here, as well, nursing officials should set the bar at a reasonable height, experts say.

Special Series: Nursing Competencies Part 3 of 3

At St. John's, which administers a written test and an observational assessment, a nurse has to get 80% of the answers correct on the written test to get a passing grade, Gloe says. Anything below that is a failing grade.

Descriptive terms may be substituted

• **For many providers, a pass/fail system has been sufficient.** But others have chosen a variant by substituting the terms "met" or "unmet" for pass or fail.

Descriptive terms such as "exceeds," "meets," or "does not meet" also have been used and are considered by some as more relevant and less either/or in describing proficiency, says **Richard Hader**, RN, PhD, CCRN, chief nurse executive at Meridian Hospitals.

Design an effective assessment tool and the scoring system is likely to mean something more, experts conclude.

• **Whatever the scoring system, nurse educators insist that the assessment process should not be a punitive ritual, but a helpful experience for nurses.**

In most cases, testing helps to reveal areas where a nurse needs to improve. The results should then lead to remedial course work or in the case of a new nurse time spent with a preceptor, says Gloe.

• **Nurses who receive a poor assessment the first time out should be given reasonable time and adequate support in demonstrating an acceptable skill level on the next assessment**, Gloe adds.

Most nurses contacted for this series favored adopting sound, established models and criteria as the basis for assessment tools.

Nolan says her facility based its assessment on the Nursing Intervention Classification (NIC), a system developed a few years ago by Iowa nurses and favored by many in critical care there because it breaks down nursing interventions into distinct patient-care areas.

They also like it because it is behavior-based rather than solely knowledge-based and tests nurses on 433 different decision-making activities.[1] **(The March 2000 issue of *Critical Care Management* will contain additional information on the Iowa NIC system.)**

Special Series: Nursing Competencies Part 3 of 3

At Genesis, managers have eschewed written tests and use the NIC to identify 50 observable core competencies relevant to the unit's workload. "Each category [in the NIC], such as infection control or fluid monitoring, describes a single expected behavior, which is observable and measurable," Nolan says. **(For more details on assessment tool models, see the first two parts of this series in *CRM*, December 1999, p. 133; and January 2000, p. 5.)**

Pay raises linked to competencies

In 1998, Meridian nurses developed an RN position description and a performance appraisal tool designed to provide "a reliable, objective measurement" on which to base merit pay.[2]

Accordingly, RNs were to be evaluated on how well they performed in their identified roles as practitioners, educators, and leaders.

Each role was defined in a position summary, and a series of 28 role indicators, including a fourth indicator representing generic competencies, was devised to measure a nurse's essential technical skills.

For example, as a practitioner a nurse had to demonstrate a level of clinical practice that "accurately reflects board of nursing code of ethics, department of health requirements, and institutional policies and procedures."

Proficiency Indicators in Role Areas

Exceeds
Role area 1: Takes appropriate charge during emergency situations, such as providing guidance to colleagues, making clinical decisions, and anticipating the need for equipment.
Role area 2: Attends more than 25 hours of documented continuing education annually.

Meets
Role area 1: Follows directions from others to facilitate rapid intervention in emergency situations, such as performing cardiopulmonary resuscitation (CPR) as directed during emergency situations.
Role area 2: Attends 15 to 25 hours of documented continuing education annually.

Does not meet
Role area 1: Does not perform basic responsibilities or leaves responsibility to others.
Role area 2: Attends fewer than 15 hours of documented continuing education annually.

Source: Hader R, Sorensen ER, Edelson W, et al. Developing a registered nurse performance appraisal tool. *JONA* 1999; 29(9):26-32.

The nurse as educator was measured by success "in teaching patients and families based on identified health need." And as a leader, a nurse had to demonstrate "the mission, vision, and values of the health system through professional excellence and personal concern."[2] **(Additional role indicators are listed on p. 21.)**

To aid evaluators, standards that resemble benchmarks were developed for each indicator. For example, for the leadership indicator the standard included: "Exercises calm behavior and uses professional judgment while working in a team approach during emergency situations."

Generic competencies included essential, technical, and bedside skills expected of all nurses and were viewed as either met or unmet.

Nurse managers in each department received the tool along with written instructions. Each RN was then assessed by whether he or she exceeded, met, or did not meet the standard for each indicator based on observed and verified written performance in the unit.

The above chart compares appraisal levels for two role indicators: leader and educator.

RN Role Indicators

Below are sample indicators of the role expected of nurses as practitioners:

- Clinical judgment/critical thinking reflects professional standards of care and practice and code of ethics in providing effective and safe patient outcomes.
- Assessment, planning, intervention, and evaluation of patient care are reflected accurately by complete and accurate documentation.
- Communicates pertinent patient information and plan of care before breaks, during transfer, and at shift report.
- Accurately completes routine assignments without the need for supervision.
- Checks charts each shift for accuracy of transcription orders.
- Properly complies with appropriate physician orders in a timely manner.
- Participates in the improvement process of quality patient care.

Source: Hader R, Sorensen ER, Edelson W, et al. Developing a registered nurse performance appraisal tool. *JONA* 1999; 29(9):26-32.

Afterward, each indicator was scored on a three-point scale (exceeded = 2 points, met = 1 point, did not meet = 0 points).

Standardized tools help in scoring

For Meridian officials, calculating a composite score taken from the total scores of the three role components was important because it formed the basis for the nurse pay increases, according to Hader.

The relative scores for each nurse weren't necessarily aimed at assessing clinical quality, but to determine relative pay levels, according to a study later released by the provider. The hospital did not disclose how the scores related to actual pay.

Hospitals have various objectives for their scoring systems. Whether it's pass or fail or some other criteria, interpreting core competencies among nurses in most cases directly reflects performance expectations with patients.

And using standardized language and testing models helps evaluators get a more objective view of performance, says Nolan. "They help in setting the bar at the right place."

References

1. Titler MG, Bulechek GM, McCloskey JC. Use of the Nursing Interventions Classification system by critical care nurses. *Crit Care Nurs* 1996; 16(4):38.

2. Hader R, Sorensen ER, Edelson W, et al. Developing a registered nurse performance appraisal tool. *JONA* 1999; 29(9):26-32. ■

Guidelines help decide care for premature infants

Guidelines provide a 'beginning point' of discussion

With premature deliveries creating more complex cases in neonatal ICUs, professionals are looking for guidance on when to aggressively resuscitate gravely ill newborns and when instead to provide comfort care for infants too premature to recover.

In Wisconsin and Colorado, doctors, nurses, families, and others have drawn up guidelines to help in these difficult decisions. The guidelines do not mandate care, but provide a "beginning point" of discussion in decision making.

Carole Kenner, DNS, RNC, FAAN, director of educational programs for the National Association of Neonatal Nurses, says she gets calls from nurses all over the country regarding end-of-life decisions in the NICU. "I would say it's a larger issue than it's ever been," she says. "We've got so much technology now that it's not a question of 'can we keep somebody alive,' but should we?"

Rules are flexible

Developers of both the Wisconsin and Colorado guidelines stress that they are not rules set in stone. Hospitals in those states are not mandated to use them, and where they are in use, each decision regarding a premature infant is taken individually.

"The guideline, in a sense, is a beginning point for discussion," says **Peter Hulac**, MD, neonatologist and associate medical director for the Colorado Collective for Medical Decisions, the body that developed the Colorado guidelines. "How it's used probably depends case by case, I suspect based on professional temperament."

Colorado's guidelines divide infants into three categories, based on a combination of gestation age, complications, and other factors:

1. In the "favorable" category are infants with mild prematurity and few serious physiological anomalies. In those cases, generally aggressive intervention is called for.

2. In the "grim" category are infants with an extremely low gestation age, as well as complicating factors such as anencephaly or other lethal birth conditions. Generally, only comfort care is given in those cases.

3. In the "uncertain" category are infants who fall between the other two categories in age and who have some complicating factors that may or may not prove fatal. In these cases, Hulac says health care professionals should educate parents and be ready to support whatever decision they make.

Currently, the Colorado guidelines define the "uncertain" category to include infants born between 24 weeks and 25 weeks, six days. But the Collective is in the midst of reviewing that timeline to see whether it should be changed in light of hospitals' experiences since the guidelines were developed three years ago.

Hulac says results for lower gestation age infants may be better outside of Colorado, perhaps because of the state's altitude. And he says a number of other factors can help determine whether a baby has a better chance of survival.

"It can vary according to gender — girls seem to have more favorable outcomes than boys — and race, since African-Americans do better than other babies. Intrauterine growth is also a factor."

Hulac says that if prenatal steroids, such as betamethasone or dexamethasone, have been given in the last few days before delivery, it can improve the baby's chance of survival and can be a factor in a decision to attempt to resuscitate.

The decision about how to proceed is made by a team that includes parents, doctors, nurses, often clergy and other trusted friends or family members. "You have to find a balance," Hulac says. "The group has to be big enough to get everyone you need and intimate enough that a decision can be made."

But he says it's important that health care professionals take a leadership role, particularly in cases where the outcome may be unfavorable. "You can get a situation where at 22 weeks, the couple may say, 'We know there's never been a baby that survived at this age; but we're 45, we've never had a baby.' Maybe they've gone through fertility treatments. They ask you to please do everything you can.

"It's our job to lead and in this case, [it] doesn't include resuscitation. At 22 weeks, it's so clear that it's important for us to be the leader here. And by leader, I don't mean 'Fuehrer,'" Hulac continues. "This is a very relationship-based situation. We have to be committed to the relationship with the family and stand right beside them."

In situations where the outcome is uncertain, he says doctors and nurses need to make sure they are giving parents a complete picture of the infant's medical status and likely outcome.

That's a point echoed by **Catherine Fleischer Groves**, RNC, MSN, NNP, a neonatal nurse practitioner and clinical educator in the neonatal ICU at Theda Clark Medical Center in Neenah, WI. Groves was a contributor in the development of guidelines in her state through the Wisconsin Association for Perinatal Care. "If a child has a poor response to the initial resuscitative efforts, of course you need to be keeping in good communication with the family, and they're going to be right there," she says. "And then you just let them know a progress report periodically on how things are going."

She gives as an example a situation in which a baby has been resuscitated, but later shows signs of internal bleeding or extremely poor lung development and little response to medication.

"When we have more information, that's what we've found to work the best — keep the family fully informed on the progress and what we expect the outcome to be or many times that we're not going to know what the outcome is for a while."

Communication with family is key

Kenner says it's important when discussing those issues with the family to understand how their belief system may affect a decision. For example, she says she recently did work in Kuwait, and found a pronounced aversion to ending life support in hospitals there.

"Once life support is started, you do not stop for any reason, even if you're on life support for months," she says. In cases where religious or other cultural issues may come into play, "somebody familiar with the culture needs to work with the family. You can't just do what Americans would do without even asking."

Kenner, Hulac, and Groves all support the inclusion of clergy in the decision-making team. Groves says Theda Clark Medical Center's NICU has its own clergyman, who is well-known in the unit and often works with families there. Some families also may be counseled by their own clergy.

Clergy were on the teams that developed both the Wisconsin and Colorado guidelines, and Hulac said they brought a vital perspective to his group's efforts. Also included on the Colorado team were people with disabilities.

"They helped us determine, when we say 'grim' outcome, what do we mean?" he says. "A bad outcome for one person might be a lifetime in a wheelchair, but to a person in a wheelchair, it's different. Their voice was important in making sure that we didn't equate imperfect outcomes with suffering."

A diversity of opinions

One reason the process of working with families on this issue can be so difficult is that there is much diversity of opinion even among doctors and nurses, Kenner says."It's difficult to reach consensus. It's really a matter of communication, of being able to sit down and have a really hard discussion. The ethics team needs to sit down with multiple disciplines and talk about how far you will go."

The Wisconsin guidelines stress the importance of communication among health care providers.

At Theda Clark, Groves says the NICU team has worked together for so long that they understand each others' views fairly well.

"We have an extremely low turnover and the average nurse has been there 15-18 years," she says. "So there's a lot of experience from which to draw and a lot of experience knowing what outcomes are out there. We have a pretty cohesive group, generally speaking, when it comes to these kinds of decision-making situations."

Also aiding in that cohesiveness is the weekly process of grand rounds, which includes everyone in the department.

"We talk about every case in the nursery and it's an opportunity for anyone to bring out any issues that they're comfortable or uncomfortable with," Groves says. "And we talk about it then and there."

The unit also has held debriefing sessions on occasion, if there were a number of unexpected deaths, to help staff work through their feelings about them.

When trying to move toward use of guidelines, Groves says it's important for nursing administration to find a "physician champion" who can lead the initiative. "There's ample opportunity for physician involvement, with input. But clearly there must be input there from all disciplines, including nursing and clergy." ■

Consumers can access sensitive data on your ICU

Growing industry helps patients make decisions

Sensitive information about your critical care unit's effectiveness with patients could be just a computer click away.

There's growing evidence that consumers are logging on to Internet sites and retrieving essential data about a hospital's clinical performance.

The information is then being used in making decisions about the best medical provider for a range of inpatient and outpatient procedures from a simple laryngoscopy to open-heart surgery.

The information includes everything from a department's average length of stay to the number of patients who undergo a given procedure each month, reports **Paul Shoemaker**, senior vice

Critical Care Management™ (ISSN 1070-4523) 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 **Critical Care Management**™, P.O. Box 740059, Atlanta, GA 30374.

Subscriber Information

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

Subscription rates: U.S.A., one year (12 issues), $275. Outside U.S., add $30 per year, total prepaid in U.S. funds. One to nine additional copies, $220 per year; 10 or more additional copies, $165 per year. Call for more details. Missing issues will be fulfilled by customer service free of charge when contacted within 1 month of the missing issue date. **Back issues**, when available, are $46 each. (GST registration number R128870672.) Continuing education credits: $50.

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

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

president of Web services with QaudraMed, a San Rafael, CA-based health care information company.

Providers join consumer bandwagon

"Consumers are becoming a lot more accountable for their well-being," Shoemaker says. "The information has always been available, but has been very difficult to access."

Nurses should be aware of the growing sophistication by patients and their families regarding key service characteristics among providers, Shoemaker says.

They should also anticipate being asked pertinent questions and should refer consumers to appropriate hospital departments, such as public affairs or patient relations, he adds.

If you think the idea is far-fetched, consider an item found in a patient newsletter recently published by the august Johns Hopkins Medical Institutions in Baltimore.

"If you are a candidate for high-risk surgery, find out how the hospital's intensive care unit is staffed before scheduling the procedure," the item advised readers.

The article went on to report Johns Hopkins researchers' findings that not having an ICU specialist on board was associated with a threefold increase in in-hospital deaths and serious complications.

The complications included cardiac arrest, kidney failure, serious infection, and need for a blood transfusion. The study was based on a survey of 46 Maryland area providers.

Web site reveals internal data

Until recently, the growing popularity of online consumer health information has focused on physician advice and general health tips.

Now consumers are logging on to sites that deliver a plethora of financial and utilization data about specific services and departments, Shoemaker says.

QuadraMed's AHD.com site contains hospital morbidity and mortality data. It also provides information by departments on individual clinical services, their average cost to charges, and utilization figures. The site also can compare the data with other facilities.

The information is taken from Medicare cost reports and American Hospital Association records in Chicago. ■

CE objectives

After reading each issue of *Critical Care Management*, participants in the continuing education program should be able to:

- identify particular clinical, administrative, or management issues related to the critical care unit;
- describe how those issues affect nurse managers and administrators, hospitals, or the health care industry in general;
- cite practical solutions to problems that critical care / intensive care managers and administrators commonly encounter in their daily activities. ■