AMERICAN HEALTH CONSULTANTS®

Smallpox Vaccine Update:
Share this breaking news with colleagues

ED NURSING

5th Anniversary

Vol. 6, No. 1

Inside

November 2002

Nursing shortage will continue: Make sure your ED stays ahead of the game

Act now to avoid serious problems later with your staffing

When asked to identify the single biggest challenge facing emergency nursing, emergency department (ED) managers, staffing experts, and staff nurses answered in unison: The growing nursing shortage.

"As government asks us to do more, pays us less — with fewer people to do it — emergency nursing will be required to redefine its roles and responsibilities," says **Barbara Weintraub**, RN, MSN, MPH, CEN, coordinator for pediatric emergency services at Northwest Community Hospital in Arlington Heights, IL.

The current shortage was predicted in the early 1980s by the Washington, DC-based Institute of Medicine (IOM), according to **Ann Kobs**, MS, RN, president and CEO of Ann Kobs & Associates, a Goodyear, AZ-based consulting firm specializing in accreditation compliance.[1]

"However, economic times became tight, CEOs had to cut spending to save their jobs, and nursing was sacrificed, being the biggest line item in the health care budget," she says.

These staffing cuts discouraged experienced nurses from staying, and nothing was done to attract men and women to the profession, Kobs says. The nursing shortage will only improve if dramatic steps are taken to reduce the growing frustration of nurses, she says. Kobs points to a 2001 report from the IOM that called

ED Nursing celebrates 5 years

This issue of *ED Nursing* marks the fifth anniversary of the newsletter. Our coverage explores the exciting future and challenges of emergency nursing. Read our cover story for current predictions on the nursing shortage. Inside the issue, see stories predicting trends in pain management, new asthma medications, use of technology such as ultrasound and telemedicine, and newly announced changes in accreditation surveys. We hope you enjoy this special issue of *ED Nursing!* ■

for a complete overhaul of the health care system.[2] **(See summary of report on the nursing shortage from the Oakbrook Terrace, IL-based Joint Commission on Accreditation of Healthcare Organizations on p. 5, and predictions for the shortage on p. 5.)**

"The IOM should be congratulated for their fine work," Kobs says. "However, if it results in no action, another, even worse shortage will ensue."

Here are current developments and predictions for the future:

• Concerns about patient care are growing.

Patients potentially could be given unsafe care due to the shortage, stresses **Darlene Bradley**, RN, MSN, MAOM, CCRN, CEN, director of emergency and trauma services at University of California-Irvine Medical Center in Orange.

"As the shortage persists, waits definitely will increase," she says.

Subscriber Information
Customer Service: (800) 688-2421 or Fax (800) 284-3291.
World Wide Web: http://www.ahcpub.com.
E-mail: customerservice@ahcpub.com.

Subscription rates: U.S.A., one year (12 issues), $339. With approximately 16 CE contact hours, $389. Outside U.S., add $30 per year, total prepaid in U.S. funds. One to nine additional copies, $271 per year; 10 or more additional copies, $203 per year. 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 $57 each. (GST registration number R128870672.)

Editorial Questions

For questions or comments, call Joy Daughtery Dickinson at (229) 377-8044.

ED Nursing™ (ISSN# 1044-9167) is published monthly by American Health Consultants®, 3525 Piedmont Road, N.E., Six Piedmont Center, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Application to mail at periodicals postage rates is pending at Atlanta, GA. POSTMASTER: Send address changes to ED Nursing™, P.O. Box 740059, Atlanta, GA 30374-9815.

ED Nursing™ is approved for approximately 18 nursing contact hours. This offering is sponsored by American Health Consultants®, which 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. This program (program # 0704-1) has been approved by an AACN Certification Corp.-approved provider (Provider #10852) under established AACN Certification Corp. guidelines for 18 contact hours, CERP Category A.

Editor: Staci Kusterbeck.
Vice President/Group Publisher: Brenda Mooney.
Senior Managing Editor: Joy Daughtery Dickinson, (joy.dickinson@ahcpub.com).
Production Editor: Nancy McCreary.

THOMSON
AMERICAN HEALTH CONSULTANTS

EXECUTIVE SUMMARY

Staffing and emergency department (ED) management experts say the nursing shortage will continue over the long term. They say that patient care could suffer as a result of increased waits and inadequate staffing.

- Lack of in-house training is linked to adverse outcomes.
- ED nurses increasingly will seek out hospitals with "magnet" status.
- Legislation may help the shortage, but it is not yet funded.

If your staffing consists largely of new graduates or inexperienced ED nurses, your liability risks are increased, she warns. It's more important than ever for ED nurses to initiate treatment prior to a physician's involvement and to recognize when a patient needs immediate attention, Bradley adds.

She suggests giving every patient a handout with information about what to expect from the ED visit. **(See the ED's "General Information" handout, inserted in this issue.)** She also advises investing in information systems that track wait times, so staffing can be adjusted to provide the best care when the need is greatest.

"Use of unlicensed assistive personnel may be another necessary option," she adds.

Kobs points to data from the Joint Commission showing that lack of adequate orientation and training is one of the primary root causes for sentinel events.[3] However, she says it's disturbing that there has been little action on the part of hospital senior leadership to invest in such activities.

She reports a recent discussion with an experienced ED nurse at a well-respected teaching hospital who reported that all in-house education was being cut, including orientation.

"This is still seen by many as fluff," Kobs says. "There seems to be an epidemic of denial on the part of leadership."

• Adequate staffing must be addressed.

The new Joint Commission staffing standards are disappointing because they don't go far enough, according to Kobs. "The scoring merely looks at whether an organization is using data from its administrative and clinical indicators to make staffing decisions," she says.

Kobs says it's doubtful that an accredited organization hasn't done what the standards require: tracking sick time, overtime, and hours per patient day, or that

if clinical outcomes deteriorated, staffing would not be considered, she explains. "This has always been part of the annual budgeting process."

Weintraub says she expects the trend of increased use of nurse practitioners in the ED will continue. She says the biggest advancement for emergency nursing in the last five years has been the emergence of this role. "This is one way of handling increasing volumes of patients, when the government is funding fewer residency programs," she says.

ED nurse practitioners are ideally suited to see large numbers of patients, critical and routine, and diagnose, treat, and educate the patients and their families, she explains.

Robin Gilbert, RN, BSN, CEN, ED manager at Central Maine Medical Center in Lewiston, stresses the need to maintain a staffing and skill mix that meets the needs of an individual ED.

"For EDs, staffing ratios may not be the best option," she says. "Nurse-to-patient ratios do not take into account admitted patients being held in the ED, the design of the department, or the current reimbursement methods that are based on hours per patient visit."

She says that a better solution is to rely on staffing formulas specifically for EDs, such as a new tool developed by the Emergency Nurses Association's (ENA) Staffing Best Practice Work Group. "This formula determines staffing based on volumes, mix, length of stay, acuity levels, and other variables," she says. **(For more information on the ENA's staffing tool, go to www.ena.org).**

Gilbert says that using this type of staffing formula is crucial to keep nurses satisfied in the coming years.

• New legislation may help the shortage.

The Nurse Reinvestment Act recently was passed and promises to fund scholarships, student loan repayment, nurse training programs such as career ladders and geriatric care, and public service announcements. **(For more information, see "Update on new law to combat nursing shortage," *ED Nursing,* October 2002, p. 166.)**

However, none of these programs have been funded yet by Congress, cautions **Kathleen A. Ream**, director of government affairs for the Des Plaines, IL-based Emergency Nurses Association.

"This law can have a significant impact, but only if we can get the funding behind it. The bill signed into law was only an authorization," says Ream. "The nursing community is working diligently to bring this to reality." *(Editor's note: To check the status of the law, go to http://thomas.loc.gov and search for bill S. 1864.)*

• EDs with "magnet" status are attracting nurses.

Hospitals designated with "Magnet Recognition Program" status by the Washington, DC-based American Nurses Credentialing Center are recognized as promoting professional nursing practice, with characteristics such as influential nurse executives and investment in nurse education.

A study has shown that facilities that met the magnet criteria have lower nurse burnout rates and higher levels of job satisfaction.[4] **(See related story on changing the culture at your ED on p. 4.)**

"Magnet status is the new and upcoming thing," says Bradley. "There are very few hospitals that have received that status as yet, but I do foresee that experienced nurses who want their professional practice recognized will seek hospitals that have this status."

The magnet status implies that an organization respects and values nursing, says Gilbert. "This program may be our road for opportunity. It will help remove the 'them vs. us' between administration and nursing," she says.

The only true way to solve the nursing shortage is to make nurses must feel valued, respected, and supported, Gilbert says. "This allows for nurses to achieve professional goals and deliver quality care that will produce

SOURCES

For more information on trends in the nursing shortage, contact:

- **Darlene Bradley**, RN, MSN, MAOM, CCRN, CEN, Director Emergency/Trauma Services, UCI Medical Center, University of California, Irvine, 101 The City Drive S., Route 128, Orange, CA 92868-3298. Telephone: (714) 456-5248. Fax: (714) 456-5390. E-mail: dbradley@uci.edu.
- **Robin Gilbert**, RN, BSN, CEN, Emergency Department, Central Maine Medical Center, 300 Main St., Lewiston, ME 04240. Telephone: (207) 795-2219. E-mail: rgilbert@cmhc.org.
- **Ann Kobs**, MS, RN, President and CEO, Ann Kobs & Associates, 3025 N. 152nd Lane, Goodyear, AZ 85338. Telephone: (623) 536-9904. Fax: (623) 536-9905. E-mail: AEJBBK@aol.com.
- **Kathleen A. Ream**, Director, Government Affairs, Emergency Nurses Association, 6534 Marlo Drive, Falls Church, VA 22042. Telephone: (703) 241-3947. Fax: (703) 534-9036. E-mail: enagov@aol.com.
- **Barbara Weintraub**, RN, MPH, MSN, Northwest Community Hospital, 800 W. Central Road, Arlington Heights, IL 60005. Telephone: (847) 618-5432. Fax: (847) 618-4169. E-mail: bweintraub@nch.org.

evidence-based outcomes," she says.

References

1. Institute of Medicine Division of Health Care Services. *Nursing and Nursing Education: Public Policies and Private Actions*. Washington, DC: National Academy Press; 1983.
2. Institute of Medicine Committee on Quality of Health Care in America. *Crossing the Quality Chasm: A New Health System for the 21st Century.* Washington, DC: National Academy Press; 2001.
3. Joint Commission on Accreditation of Health Care Organizations. Sentinel Event Statistics. Root Causes of Sentinel Events (All Categories). May 1, 2002. (www.jcaho.org/accredited+organizations/ambulatory+care/sentinel+events/root+causes+of+sentinel+events.htm).
4. Aiken LH, Havens DS, Sloane DM. The Magnet nursing services recognition program: A comparison of two groups of magnet hospitals. *Am J Nurs* 2000; 100:26. ■

Secrets for keeping your ED nurses happy

There is a general consensus that a sea change must occur in EDs to effectively recruit and retain emergency nursing staff.

"It's not just a nursing shortage, and it is shortsighted to view it as such," says **Ann Kobs**, MS, RN, president and CEO of Ann Kobs & Associates, a Goodyear, AZ-based consulting firm specializing in accreditation compliance. "In order to keep nurses, the entire culture must change," she says.

For example, there is a growing need to create a work environment to support the aging work force, says **Robin Gilbert**, RN, BSN, CEN, ED manager at Central Maine Medical Center in Lewiston.

"We need to supply nurses with the physical design and technology that will retain them, and allow them more time for direct care giving," Gilbert says.

She gives examples of computerized patient records and high-definition information monitors to free up nurses from excessive paperwork that takes time away from patients, automatic stretchers to reduce work-related injuries, and flexible scheduling to help nurses balance home life and work.

Also, it is important for ED nurses to have a positive collegial relationship with the physicians they work with every day, says **Darlene Bradley**, RN, MSN, MAOM, CCRN, CEN, director of emergency and trauma services at University of California-Irvine Medical Center in Orange. She gives the following suggestions:

• Set up nurse/physician teams with regular meetings to strategize for care improvements and operational changes for any high-volume and problem-prone specialty.

• Arrange for a physician to attend nursing staff meetings and a nurse to attend medical staff meetings to discuss and resolve mutual issues.

• Have patient care rounds to review the work in progress for each discipline and plan for discharge or admission.

• Develop joint ventures such as public speaking engagements, community service events, research, and publication that involve nursing and medical staff.

Consider these creative solutions

To facilitate a culture change, many creative solutions are in progress at emergency departments (EDs) throughout the country, Bradley says.

"This includes sharing educational resources among hospitals to train emergency nurses," she says.

In addition to providing sign-on bonuses, improving benefits packages, and offering educational benefits, there is a lot you can do to reduce your vacancy rates, Bradley says. She points to the following recruitment and retention strategies used at her ED:

There is an annual weeklong celebration of nursing during Emergency Nurse Week in October. Here are some activities:

— "Teas for the soul": On the day and night shift, a cart of cookies and flavored teas is set up, with ED leadership serving nurses.

— "Favorite snack day": All nurses are invited to bring in their favorite food, which is shared around the clock.

— Lunch and dinner are catered for all nursing staff, and they are paid for by the emergency medicine faculty.

— A happy hour is hosted at a restaurant across the street from the hospital, and is paid for by the emergency medicine faculty.

— A nurse of the year is selected.

Each day, raffles are held with a prize for every nurse, such as publications from the American Heart Association, pen and pencil sets, body lotion and soap sets, T-shirts, and picture frames. Bradley says the costs are minimal since most of the gifts are donated by ED leadership and company vendors.

A meditation room with massage chairs and a CD player is available for nurses to relax and listen to music. The massage chairs were purchased for staff use by the facility's chief nursing officer, says Bradley.

Videoconference education is made available so nurses can obtain a bachelor of science degree in nursing.

Staff are recognized on the "Star Board,"' which is a bulletin board specifically designated for staff

Here are 6 predictions for nursing shortage

Here are predictions for emergency nursing recruitment and retention in the coming years, from **Barbara Pierce**, RN, MN, director of emergency services at Huntsville (AL) Hospital System:

1. The shortage of nurses will fluctuate, and pay and benefits will be a driving factor.
2. Pay and benefits for nursing gradually will improve over the next few years as a result of competition. However, developments such as salary caps for agency nurses may keep salaries down somewhat.
3. Pay will be more outcomes-based. Incentives for quality such as satisfaction, error rates, turnaround times, and clinical expertise will be built into base salaries to improve performance and compliance.
4. Staff members will not remain with companies for their lifetimes, but will be drawn to facilities with key programs such as education, staff amenities, and career counseling.
5. Hospitals will compete for competent, qualified staff through programs such as improved retirement plans. They will provide housing in the form of leased apartments for nurses who are relocating. Education programs will include hospitals joining with colleges or starting their own college-based programs. Hospitals paying for education will become more prevalent, including signing contracts with nursing staff to work while they go to school.

   EDs will be more active in recruiting individuals with a "fit" for emergency nursing, then provide training for the necessary skills. There will be longer-term mentoring programs and teaming of the senior staff with the younger staff. Hospitals will help nurses to achieve long-term goals by offering to train nurses in advanced fields such as nurse practitioners and certified registered nurse anesthetists.
6. Tolerance for errors by the public will be very low. As a result, nurse-patient ratios will continue to decline to achieve better patient care outcomes and fewer errors. ■

recognition. Compliments from peers and other departments, customer service feedback, and positive newspaper articles are posted. Paper stars are placed all over the board listing the names of nurses and a description of their achievements.

"When the board becomes crowded, we take down the recognition and place it in the employee's employment file so we don't forget to recognize them again during their annual performance review," she says. "The board encourages everyone to recognize the good works we do on a regular basis."

In addition, an employee of the month is selected from the ED nursing staff, says Bradley. **(See Emergency Services Employee of the Month Nomination Form inserted in this issue.)**

Nursing grand rounds provide free meals, continuing education, and an opportunity to network.

The chief nursing officer and the department director make rounds on the units monthly to discuss nursing issues.

Staff morale is linked more closely to recognition than money, emphasizes Bradley.

"Managers would do well to involve staff in decision making, in day-to-day operations, and on the development of teams," she says. "Above all, managers should strategize how best to recognize their staff for the efforts they do daily." ■

Accreditation surveys will never be the same

Pilot site offers 'sneak peek' at new process

A new survey process by the Oakbrook Terrace, IL-based Joint Commission on Accreditation of Healthcare Organizations holds nurses more accountable for care delivered, according to one pilot test site.

"They not only looked at the chart for pain, restraints, and vital signs, but went a little deeper and looked at the end result, what happened to the patient," says **April Dukes**, RN, BSN, head nurse of the emergency department (ED) at Tift Regional Medical Center in Tifton, GA. "It was more in-depth and pinpointed areas that needed attention."

Dukes obtained a "sneak peek" at the new survey process when her facility participated in a pilot study this past June. The surveyors reviewed charts of patients who were being treated, says Dukes.

"They focused a great deal on continuity of care and looked at the care provided by EMS, then the ED, then the medical floor," she reports.

Another difference predicted from the changes to the accreditation process is an end to the frantic preparations

before every survey. The Joint Commission Initiative for Accreditation Process Improvement is described as a paradigm shift to change the focus from survey preparation to continuous operational improvement. It will be effective as of January 2004. However, organizations will need to start preparing now by scheduling a self-assessment 15-18 months after their most recent survey, according to the Joint Commission.

Joint Commission officials say that it will improve the consistency of surveys, distribute best practices to educate facilities, and use more technology in the survey process. Here is how surveys will change:

Standards will be streamlined, with a reduced documentation burden to focus more on critical patient care issues.

There will be a self-assessment process for compliance, to free up survey time for the most critical patient care issues.

The new survey process will have six basic components: an opening conference, a leadership interview, validation of self-assessment results, a focus on actual patients as the framework for assessing compliance with selected standards, discussion and education on key issues, and a closing conference.

Focus on care instead of standards

The best way to prepare for the new survey process is to pay less attention to individual standards and more attention to how overall systems impact patient care, according to **Michelle H. Pelling**, MBA, RN, president of The ProPell Group, a Newberg, OR-based health care consulting group specializing in survey preparation and performance improvement.

"Examine the accuracy, timeliness, and safety of your patient care processes and how well they coordinate with other processes in the hospital," she advises. "This will be a more beneficial use of resources when it comes to survey preparation."

It's most important for you to consider the main processes critical to the provision of care and smooth operations of the ED, Pelling says. These include patient assessment, medication use, communication, and information management, she says.

For each of these systems, she says you should assess the degree of vulnerability for noncompliance with standards. The goal is to move toward continual operational improvement, she says.

"In the end, the true test is whether the ED department has been able to effect better, safer care for their patients," she says.

Your ED will be meeting the individual Joint Commission standards as a "by-product" of doing the right things for your patients, she says.

SOURCES

For more information about the new survey process, contact:

- **April Dukes**, RN, BSN, Emergency Department, Tift Regional Medical Center, 901 E. 18th St., Tifton, GA 31794. Telephone: (229) 382-7120. Fax: (229) 382-7120. E-mail: adukes@tiftregional.com.
- **Michelle H. Pelling**, MBA, RN, The ProPell Group, P.O. Box 910, Newberg, OR 97132. Telephone: (503) 641-1987. Fax: (503) 646-9847. E-mail: michelle@propellgroup.com. Web: www.propellgroup.com.

Overall, Pelling says the new survey approach is much more pragmatic and useful approach to improving critical processes and addressing patient safety challenges. The proof will be in how well the Joint Commission executes it, she says.

"Survey prep" will continue to be labor-intensive for your ED, she adds. "The good news is that preparing for the new accreditation process may be labor that results in improving the way we provide care and keep patients safe," she says. ■

What does the future hold for emergency nursing?

Here is how two *ED Nursing* editorial advisory board members answered the question: What are some of the top challenges emergency nurses will face in the future?

• Continued overcrowding.

Overcrowding is a major problem in even small and rural emergency departments (EDs), according to **Trudy A. Meehan**, RN, CHE, director of emergency services at East Jefferson General Hospital in Metairie, LA. She expects that this trend will continue.

"Unless there are some legislative reforms to provide primary care physicians and clinics for the uninsured, I am not certain this problem will be one ED nurses can control," Meehan says. "Unfortunately, with legislative reform, we will move to a more socialized form of health care, which causes me trepidation."

• The need for appropriate staffing.

SOURCES

For more information on challenges facing emergency nursing, contact:

- **Reneé Holleran**, RN, PhD, Chief Flight Nurse, University of Cincinnati Medical Center, P.O. Box 670736, Cincinnati, OH 45267. Telephone: (513) 584-7522. Fax: (513) 584-4533. E-mail: reneeflightnurse@msn.com.
- **Trudy A. Meehan**, RN, CHE, Director, Emergency Services, East Jefferson General Hospital, 4200 Houma Blvd., Metairie, LA 70006. Telephone: (504) 454-4018. Fax: (504) 456-5428. E-mail: tmeehan@ejhospital.com.

There is a trend of states passing legislation to require a specific nurse-to-patient ratio, but this is not evidence-based, doesn't address patient acuity, and may not provide safe, quality care, says Meehan.

"These laws also do not address the importance of ancillary personnel in the scheme of good patient care," she says. "This potentially could leave the nurse with a 1-to-4 patient ratio and no support staff to assist in patient care or enter orders."

An important step in the right direction is the new staffing guidelines developed by the Des Plaines, IL-based Emergency Nurses Association (ENA), Meehan says. "Once facilities begin using this database, we will be able to share information and begin to develop guidelines that optimize patient care and use the appropriate resources," she says. *(For more information about the staffing guidelines, go to the ENA's web site, www.ena.org.)*

ENA explores academy

• More professional standing for ED nurses.

The ENA has approved a resolution to explore establishing an Academy of Emergency Nursing, Meehan notes. The academy would recognize outstanding achievements and contributions to the field of emergency nursing; provide leaders who would provide vision to advance emergency nurses; and allow more ENA members the opportunity to impact the direction of the profession, says Meehan.

After nurses complete an application, acceptance into the academy will be done by a peer review process, she explains. Members would then be entitled to use the initials FAENA, standing for fellow in the Academy of Emergency Nurses Association.

While the process has not yet been completed, Meehan says that approval of the resolution is a giant step forward for emergency nurses.

"As the academy evolves, nursing could develop the same level of acceptance and prestige as physicians who are fellows in their area of specialty practice," she says. "I look forward to the evolution of this process."

Patients to reflect diversity

• Increased diversity.

There is increased cultural diversity in areas of the country where this was not common only five years ago, and this is reflected in the languages, customs, and religions of ED patients, reports **Reneé Holleran**, RN, PhD, chief flight nurse and clinical nurse specialist at University of Cincinnati Medical Center.

"Many health care providers are learning Spanish, including myself," Holleran says.

Use EDs in larger cities such as New York and Los Angeles as models, since they have been working with diverse populations for years, she suggests.

Holleran also advises familiarizing yourself with accreditation guidelines on diversity and the ENA position statement on this topic. *(Editor's note: This statement can be accessed at no charge on the ENA web site, www.ena.org. Click on "Publications," "Position Statements," "Diversity in Emergency Care, 7/01.")*

• The growing use of alternative medicine.

Patients will continue to use alternative medicine in growing numbers, due to dissatisfaction with traditional care, Holleran predicts.

"Drugs are causing more harm in some cases and not helping at all in others," she says. "Also, drug interactions and mistakes have increased significantly."

Ask patients specifically whether they take herbs or undergo any alternative treatments, Holleran emphasizes. "One of the most serious things to avoid are drug interactions that may cause bleeding," she says. **(For more information on this topic, see "Do you screen patients for alternative therapy use?" *ED Nursing,* August 2001, p. 133.)**

• Need for better bioterrorism preparedness.

EDs will continue to invest in bioterrorism preparedness only if they are directed to do so, Holleran predicts.

"This is the problem now; mandates keep coming with no financial consideration," she says. "EDs do not have the staff or monies for a lot of this training."

There is a lack of coordination and direction for how to prepare, Holleran says. "There is very little research that addresses what is the best method of preparation," she adds. ■

New, more specific asthma meds are on the horizon

In the coming years, you'll have exciting new treatment options to care for asthma patients in your emergency department (ED). Here are two trends to watch for:

• More specific medications.

Promising asthma medications on the distant horizon specifically will target some of the exact cells and mediators responsible for inflammation and bronchospasm, predicts **Rita K. Cydulka**, MD, MS, associate professor at Case Western Reserve University School of Medicine in Cleveland.

Although these medications still are in the experimental phases, they will have a dramatic impact on your practice, she says. Use of the drugs will mean that patients will be able to manage their asthma better, and therefore, fewer patients would wind up in EDs, she explains.

"There would be fewer exacerbations, because the mediators wouldn't have a chance to be released or to act. Treatment also would be quicker, because of the binding of mediators," Cydulka says.

In the meantime, follow updated recommendations from the Bethesda, MD-based National Asthma Education and Prevention Program's Expert Panel, Cydulka urges. **(For more information on this topic, see "Updated asthma guidelines are here: Are you giving the right medications?" *ED Nursing,* September 2002, p. 141.)**

"All personnel who care for asthma should take steps to make patient compliance with the guidelines both affordable and easy," she says.

• Increased use of existing interventions.

Two key medications are approved, but not yet commonly used in the ED, according to **Lee M. Trexler**, RN, research nurse for the department of emergency medicine at MetroHealth Medical Center in Cleveland.

Levalbuterol has fewer side effects than albuterol and works just as well in opening the patient's airway, she says. "Patients don't get tachycardia, even with multiple stacked doses."

A second medication, fluticasone propionate and salmeterol inhalation powder, is also approved but not yet used in most EDs, Trexler says.

She says she hopes that in the near future, one key intervention will become common practice in the ED: collecting pre-treatment peak flows, or forced expiratory volume at 1 second (FEV1). "I can't stress enough the importance of this," she says.

SOURCES

For more information on asthma management, contact:

- **Rita K. Cydulka**, MD, MS, Associate Professor, Case Western Reserve University School of Medicine, Department of Emergency Medicine, MetroHealth Medical Center, 2500 MetroHealth Drive, Cleveland, OH 44109. Telephone: (216) 778-2864. Fax: (216) 778-5349. E-mail: rcydulka@metrohealth.org.
- **Lee M. Trexler**, RN, Research Nurse, Department of Emergency Medicine, MetroHealth Medical Center, 2500 MetroHealth Drive, Cleveland, OH 44109. Telephone: (216) 778-5344. Fax: (216) 778-8373. E-mail: ltrexler@metrohealth.org.

The FEV1 is more accurate and a better indicator of asthma severity because it is a measure of the lower airway, Trexler says. Pulmonary function tests should be done before the first aerosol treatment if the patient condition allows this to be done, she says. "This measurement gives important objective data," she says. ■

You must brace for change in ED pain management

There are a number of significant advancements in pain management that will impact your clinical practice, according to **Paula Tanabe**, RN, PhD, CCRN, CEN, research coordinator and research assistant professor for the division of emergency medicine at Northwestern Memorial Hospital and Feinberg School of Medicine in Chicago. Here are several:

• More choices in analgesic agents.

There has been a great deal of recent attention to the cyclooxygenase (COX)-2 specific inhibitors, Tanabe reports. "Marketing efforts by the pharmaceutical companies have been very strong," she says.

However, evaluation of the data reveals that these analgesic agents are no more effective than ibuprofen, and COX-2 inhibitors are significantly more costly, she adds.[1]

Oral analgesics containing acetaminophen and hydrocone are being prescribed more frequently, says Tanabe.

She explains that Norco (Watson Pharmaceuticals, Corona, CA) is an excellent analgesic choice for patients who need to be discharged from the emergency

EXECUTIVE SUMMARY

Trends in pain management include increased use of patient-controlled analgesia pumps, conscious sedation, and less use of the intramuscular route of administration and meperidine.

- Research shows that COX-2 specific inhibitors are no more effective than ibuprofen.
- Consider the use of oral morphine and hydromorphone for patients with severe pain and poor intravenous access, and fentanyl for trauma patients, acute abdominal pain, and conscious sedation.
- There will be increased use of propofol, brevitol, and etomidate for conscious sedation procedures.

department (ED) on stronger analgesics.

The drug contains 10 mg of hydrocodone and 325 mg of acetaminophen. These are the same agents contained in the drug Vicodin (Abbott Laboratories, Abbott Park, IL), but in different amounts. Vicodin contains 5 mg of hydrocodone and 500 mg of acetaminophen, she says.

"The advantage of Norco is that it provides double strength hydrocodone with less acetaminophen," says Tanabe. "Patients are frequently limited in the number of Vicodin that can be taken, because of the amount of acetaminophen."

• Appropriate use of existing agents.

Tanabe says that she doesn't expect to see many other "new" analgesic agents that will affect the ED. "However, I do believe that as ED physicians and nurses become more educated about pain management, EDs will begin to use more agents that are currently available," she predicts. **(For more information on this topic, see "Out of compliance with standards? You must assess and treat pain quicker," *ED Nursing,* March 2000, p. 53.)**

She gives the following examples:

— Hydromorphone is an excellent analgesic that is seven times as strong as morphine with similar duration of action, says Tanabe. "A common dose of hydromorphone is 0.5 to 1 mg. It is interesting that ED nurses are not reluctant to give 1 mg of hydromorphone, which is equivalent to morphine 7 mg," she says.

— Fentanyl is an analgesic with a short duration of action, says Tanabe. "This is an excellent choice for trauma patients, acute abdominal pain, and conscious sedation procedures," she says.

• Decreased use of intramuscular administration.

The intramuscular route of administration will decrease, according to **Pat Spurlock**, RN, clinic administrator at Neurological Associates of Des Moines (IA) and former service line director for emergency services at Mercy Medical Center, also in Des Moines.

"Titrating medications administered intravenously provides individualized, rapid pain relief without the greater risk of overmedicating patients," she explains.

• Less use of meperidine.

Tanabe says she hopes that fewer EDs will continue to rely on meperidine as the analgesic agent of choice. Meperidine has an active metabolite with a long half life that is toxic to the central nervous system, she explains. "Morphine, hydromorphone, and fentanyl are much safer and more effective analgesics," says Tanabe.

• More frequent use of other routes of administration.

Oral morphine and hydromorphone are both excellent choices for patients with severe pain and poor intravenous (IV) access, according to Tanabe.

If you choose to administer these agents in an oral form, the correct equianalgesic dose must be administered, cautions Tanabe. She stresses that it is important to know the IV to oral equianalgesic conversion rates, as follows: Morphine 1 mg IV is equivalent to 3 mg orally. Hydromorphone 2 mg IV is equivalent to 8 mg orally.

She adds that morphine sulfate immediate-release tablets are available in 15- and 30-mg dosages.

"It is also important to remember that these oral forms peak in 60 minutes," she says. "Additional doses cannot be repeated prior to this time."

• More use of patient-controlled analgesia (PCA) pumps.

Although not many EDs currently use PCA pumps, this will become more common, Tanabe predicts. "Some select patient populations may benefit from this method of analgesic administration," she says. "Sickle cell patients and some trauma patients may be candidates for PCA administration." **(For more information on this topic, see "Give a PCA pump to patients in pain," *EDN,* December 2001, p. 27, and "Are your sickle cell patients in danger? Follow new pain management guide," *EDN,* July 2001, p. 113.)**

• Increased use of conscious sedation.

Spurlock says that conscious sedation with pharmacological agents previously used only in the surgical setting by anesthesiologists will continue to grow in the ED, both in adult and pediatric patient injuries. "Recovery time is less with patients reaching baseline in a shorter period of time, while still achieving the goal of pain relief with amnesiac benefits," she explains.

Tanabe foresees increased use of propofol, brevitol, and etomidate for conscious sedation procedures, which produce a deep sedation. "If these agents are given rapidly to reduce a dislocation, it's possible that fewer

SOURCES

For more information on pain management, contact:
- **Pat Spurlock**, RN, Neurological Associates of Des Moines, 1601 N.W. 114th St., Suite 338, Des Moines, IA 50325. Telephone: (515) 223-1917. Fax: (515) 223-0284. E-mail: djtneuro@aol.com.
- **Paula Tanabe**, RN, PhD, CCRN, CEN, Research Coordinator and Research Assistant Professor, Northwestern Memorial Hospital and Feinberg School of Medicine, Division of Emergency Medicine, 676 St. Clair, Suite 2125, Chicago, IL 60611. E-mail: ptanabe2@nmff.org.

analgesic agents will be needed," she says.

Reference

1. Silverstein FE, Faich G, Goldstein JL. Gastrointestinal toxicity with Celecoxib vs. nonsteroidal anti-inflammatory drugs for osteoarthritis and rheumatoid arthritis. *JAMA* 2000: 284;1,247-1,255. ■

Technology to advance dramatically in the ED

Are you ready for significant changes in emergency department (ED) technology, such as nurses' use of ultrasound? If not, you could be in trouble, some ED experts warn.

"We will see a big shift in technology that will occur in the next five years," predicts **Mike Williams,** president of the Walnut Creek, CA-based Abaris Group, a consulting firm that specializes in ED management.

Today, technology plays a surprisingly small role in the ED, Williams acknowledges. He estimates that only 25% of EDs use electronic patient tracking and only 10% use electronic patient record systems. **(See related story on how technology will increase access to patient care information, p. 14.)**

"The challenges have been poor productivity of the patient document systems," he explains. "Today, they simply are not designed to speed up the patient care process, and the patient tracking systems have a high cost of about $250,000 per hospital."

Williams also estimates that less than one in 50 EDs has digital radiology or bedside ultrasound.

Here are forecasts for how technology will change ED nursing practice:

• Nurses will use ultrasound.

ED nurses soon will be using ultrasound to put in intravenous lines on difficult access patients, **Michael Blaivas**, MD, RDMS, associate professor and director of emergency ultrasound for the department of emergency medicine at the Medical College of Georgia in Augusta.

In fact, his facility is beginning to train ED nurses to do this, he says. "This will initially include basilic and saphenous veins and will make for great access even in patients who have had cut downs and central lines."

Obtaining access and a line can be lifesaving in some instances, says Blaivas, adding that even in less critical patients, it can save hours of delays in lab draws or administration of antibiotics.

"We will be using a brand new SonoSite machine [Bothell, WA] developed just for vascular access," he reports. Blaivas says this technology offers direct visualization of the target vessel, and absence of visual or palpable landmarks is no longer relevant.

Nurses will be taught on inanimate models similar to those used by phlebotomists, but specially designed for ultrasound, he adds.

After training is completed, policy and standards for this practice will be implemented. "Where we go with this from there is anyone's guess," he says.

• Telemedicine use will increase.

In time, you'll be able to obtain access to specialists in tertiary hospitals all over the country via telemedicine, predicts Blaivas. "You will be able to effectively practice with a variety of physicians," he says.

He gives the example of a nurse at a rural ED with a patient with an unusual rash, strange repetitive movements, or some other odd physical finding. In this scenario, you'll be able to contact a dermatologist, neurologist, infectious disease specialist or ED physician at the nearest tertiary care facility for help with diagnosis and treatment, he explains.

He reports that his ED is running a pilot program in which emergency nurses in outlying facilities contact

EXECUTIVE SUMMARY

Technology advances will increase dramatically in the next five years, predict emergency department (ED) management experts.
- You soon may be using ultrasound to put intravenous lines in difficult access patients.
- More advanced evaluation and testing will be done at triage, such as d-dimer, troponin I tests, and assessment of deep-vein thrombosis.
- Telemedicine use will increase dramatically for rural EDs and prison infirmaries.

SOURCES

For more information on technology in the emergency department, contact:

- **Michael Blaivas**, MD, RDMS, Associate Professor, Director of Emergency Ultrasound, Department of Emergency Medicine, Medical College of Georgia, Augusta, GA 30912-4007. Telephone: (706) 721-2613. E-mail: blaivas@pyro.net.
- **Mike Williams**, President, The Abaris Group, 700 Ygnacio Valley Road, Suite 250, Walnut Creek, CA 94596. Telephone: (925) 933-0911. Fax: (925) 946-0911. E-mail: theabaris@aol.com.

Blaivas' ED to evaluate stroke patients for possible tissue plasminogen activator treatment.

The ED soon may be connected with a busy infirmary run by nurses at a large state prison, he adds. "We are hoping to one day avoid the need to transfer the majority of their patients for evaluation by using telemedicine," he says.

Telemedicine programs are being funded by state and federal dollars to improve care delivery to remote areas and areas in need, says Blaivas. "There are a number of large medical centers that offer telemedicine now, and I have seen it at two that I have worked at," he says. "This will take off like crazy in the near future."

• There will be more advanced testing at triage.

Blaivas says he expects to soon see nurses doing more advanced evaluation at triage, such as on-the-spot d-dimer and troponin I tests.

As wait times increase, more evaluation and testing will need to be done *before* a patient gets to the treatment room, he says.

For example, nurses may help determine if a patient with a swollen leg has a deep-vein thrombosis (DVT) with ultrasound or strain gauge plethysmography, Blaivas adds. This currently is being done by ED nurses in the United Kingdom, he reports.[1,2]

Doing this can cut hours from a patient's workup and identify patients who should be seen right immediately, he says. "A negative d-dimer may mean a patient with a swollen leg can wait the two hours, while a positive one might need to be brought back a bit sooner since you are worried about DVT," he explains.

• Electronic patient records will improve.

Use of systems that match staffing to demand in "real time" will become critical, as more patients are managed with fewer resources, says Williams. Use of patient tracking will increase dramatically, as systems improve and costs are reduced, he says.

"In particular, I see electronic patient record keeping being re-engineered to improve productivity instead of decreasing it," he says.

• Bedside testing for laboratory services will become more common.

Support for this technology is increasing due to automation of quality assurance parameters, says Williams. "That was the major stumbling block from before," he explains. "This is improving, as some bedside test machines will shut themselves down if they do not receive a QA check."

References

1. Maskell NA, Cooke S, Meecham Jones DJ, et al. The use of automated strain gauge plethysmography in the diagnosis of deep-vein thrombosis. *Br J Radiol* 2002; 75:648-651.
2. Robinson BJ, Kesteven PJ, Elliott ST. The role of strain gauge plethysmography in the assessment of patients with suspected deep-vein thrombosis. *Br J Haematol* 2002; 118:600-603. ■

ED nurses tapped for smallpox immunizations

CDC recommends vaccine for 510,000 workers

Emergency department (ED) nurses in every hospital in the country are expected to be offered smallpox vaccine as part of bioterrorism response plan approved in October by advisors to the Centers for Disease Control and Prevention (CDC) in Atlanta.

The CDC's Advisory Committee on Immunization Practices (ACIP) approved a plan that calls for smallpox immunization of some 510,000 health care workers. As

EXECUTIVE SUMMARY

Emergency department nurses at every U.S. hospital are expected to be offered smallpox vaccine as part of a bioterrorism plan approved by a CDC advisory committee in October.

- All hospitals should designate a "smallpox response team" that will be immunized prior to any release of the virus. Teams should include about 40 health care workers per hospital, including 15 ED physicians and nurses.
- Due to the potential for adverse effects from the vaccine, health care workers with a history of prior smallpox vaccination should be given preference for selection to the hospital care team.

outlined at the meeting, all hospitals should designate a "smallpox care team" that will be immunized prior to any release of the virus. ACIP recommends that the team include about 40 health care workers per hospital, including 15 ED physicians and nurses. In addition to emergency staff, the teams will include the hospital epidemiologist and infection control professional(s), eight intensive care nurses for adult patients, eight pediatric ICU nurses, one infectious disease consultant, one dermatology consultant, four respiratory therapists, four radiology technicians, two engineers, and selected staff from the security and housekeeping departments.

"ACIP will provide guidance for developing a hospital care team prepared to respond and take care of the first smallpox patients," says **Jane Siegal**, MD, who advised ACIP on the issue as a member of the CDC's Healthcare Infection Control Practices Advisory Committee. "[This is the] suggested composition of the team. I think individual hospitals have to look at that and look at the types of patients they see, the type of care they provide, and decide who it will be [on the team]. This provides some guidance."

In making the recommendation, the committee was well aware of the possible adverse effects of giving people vaccinia virus (cowpox) to protect them from variola virus (smallpox). Progressive vaccinia, a potentially fatal complication of vaccination, has occurred almost exclusively among immunocompromised people. Approximately 15%-25% of vaccinees who develop post-vaccinal encephalitis die, and 25% have permanent neurological sequelae. Most deaths caused by vaccination are the result of post-vaccinal encephalitis or progressive vaccinia. Overall historical death rates are approximately one death per million people on initial vaccinations and 0.25 deaths per million revaccinations. Thus, health care workers with a history of prior smallpox vaccination should be given preference for selection to the hospital care team, Siegal says.

Still, the decision to immunize 500,000 people against a disease that no longer occurs in the wild was worrisome to some.

"We haven't seen a case of smallpox on this planet in 25 years," warned **Paul Offit**, MD, ACIP member and infectious disease chief at the Children's Hospital of Philadelphia. "Would it not be reasonable to put this system in place — make the vaccine and get it out there under lock and key, make guidelines [stating] clearly who should be vaccinated — [and then implement it] following a single documented case? If you immunize 500,000 people, there will be people who have serious adverse events. There will be contacts of [immunized] people who will have serious adverse events. We will do more harm. I wonder if we could jump with a [safety] net a little bit by waiting for just the first confirmed case, but be ready when that happens."

However, other committee members warned that last year's anthrax attacks showed how vulnerable the nation is to bioterrorism agents. The prevailing opinion was that the price of unpreparedness against smallpox would be immense. Offit's was the only dissenting vote on the 12-member panel.

"If there is not a case of smallpox, we will be doing more harm than good," he said. "I guess at this point we don't know whether or not there will be a case of smallpox. This is like a case study in how terrorism works."

The CDC recommendation awaits the approval of the Department of Health and Human Services and top government officials, who have been mulling the pros and cons of immunizing all or portions of the populace. However, the tone of discussions at the ACIP meeting indicated a full expectation that the government is preparing to move ahead with smallpox immunization of health care workers. The process of licensing the vaccine is expected to be completed by the end of the year, and health care immunizations may follow early next year, committee discussion indicated.

The hospital recommendations are designed to complement — not necessarily replace — previous ACIP recommendations to immunize state-based smallpox teams. Though those June 2002 recommendations have yet to be approved by the government, the end result is expected to be some combination of immunizing public health response teams and hospital-based teams. What the CDC is clearly moving away from is the concept of "designated" smallpox hospitals. In addition to logistical concerns of with that plan, there was little interest among hospitals in volunteering for the duty, ACIP discussions revealed. ■

Be prepared to change stroke and cardiac care

New treatments, medications predicted

You can expect new treatments and interventions for cardiac and stroke patients to keep coming at a breakneck pace, according to **Marli Bennewitz**, RN, BSN, chest pain center coordinator at St. Jude Medical Center in Fullerton, CA.

"More Americans die from heart attack and stroke than all cancers combined, and the advances in this field are fast-paced and ever changing," she says.

The challenges you face as a result of these changes will be multifaceted, says **Debra Graf**, RN, BSN, CEN, an emergency department (ED) educator at

EXECUTIVE SUMMARY

Changes for stroke and cardiac patients include pre-hospital use of electrocardiograms and cardiac medications, increased use of reperfusion therapies, and existing agents being used in new combinations.

- Treatment windows for use of thrombolytics for stroke may be extended.
- New single bolus fibrinolytic agents, glycoprotein IIb/IIIa inhibitors, and low molecular weight heparins are being developed.
- Certain cardiac drugs may be effective for stroke patients.

Community Medical Center in Toms River, NJ.

"In addition to keeping abreast of new drugs and therapies that are continually emerging, the ED nurse is instrumental in identifying eligible patients and facilitating their entry into the appropriate care pathway," she says.

Here are changes that will affect the way you care for patients:

• New medications will be used.

New single bolus fibrinolytic agents, glycoprotein IIb/IIIa inhibitors, and low molecular weight heparins are being developed, says Graf. Existing agents are being studied in various combinations to lower mortality and morbidity associated with myocardial ischemia and infarction, she adds.

For example, Bennewitz points to current studies using glycoprotein IIb/IIIa inhibitors in combination with low molecular weight heparin for acute myocardial infarction.

• There will be more aggressive pre-hospital care.

Bennewitz expects to see dramatic changes in the way cardiac patients are cared for *before* they arrive at the ED.

"I foresee a broader use of pre-hospital electrocardiograms, and along with this, a more aggressive use of cardiac medications in the field," she says.

This is a very positive change, Bennewitz says. "In an era where we have surgeons using robots to perform surgery, it is only realistic that we begin the aggressive care of our acute coronary syndrome patients in the pre-hospital arena," she says.

• There will be changes in reperfusion strategies.

Reperfusion strategies for use in myocardial infarction and stroke will continue to be refined over the next few years, Graf says. Although existing reperfusion therapies have been shown to be beneficial, they are underutilized in eligible patients with cardiac or cerebral ischemia, she argues.

"More and more EDs will be establishing dedicated areas or established protocols to care for these patients in a more efficient manner," she says.

• Cardiac medications will be used for stroke patients.

Cardiac medications such as abciximab and retaplase are in clinical trials for treatment of stroke, says Graf.

She adds that a defibrinogenating enzyme derived from snake venom is another type of agent being evaluated to restore perfusion in stroke.

Research also is under way in the use of neuroprotective agents to be used with thrombolysis to synergistically improve outcomes, Graf reports. Drugs such as zonampanel and repinotan possibly will inhibit the ischemic cascade, she says, and glycerol and nitrone may be shown to reduce reperfusion injury.

• Treatment windows may be extended.

Emerging therapies may extend the traditional treatment window of three to 24 hours for a stroke patient to be eligible for thrombolytics, says Graf. This change will have important implications for triage nurses, she emphasizes.

Although public education has raised community awareness of heart attack symptoms and the importance of early access to care, the same is not true for stroke, Graf adds.

"We as ED nurses have a tremendous opportunity to impact this, through education of every patient who passes through our department," she advises. ■

GUEST COLUMN

How knowledge-based care will affect your practice

By **Brian Duggan**, MSN, RN
Web Services Director
Premier Sourcing Partners
Charlotte, NC

In the very near future, emergency department (ED) nurses and physicians will have more access to expert knowledge that will improve patient care. Here are some developments:

• Better electronic medical records.

The electronic medical record (EMR) has been the holy grail of health care information technology for several years, but its delivery has been less than satisfactory. In theory, the EMR contains a complete record of

SOURCES

For more information on stroke and cardiac care, contact:

- **Marli Bennewitz**, RN, BSN, Chest Pain Center Coordinator, St. Jude Medical Center, 101 E. Valencia Mesa Drive, Fullerton, CA 92832. Telephone: (714) 992-3000, ext. 3463. Fax: (714) 992-3109. E-mail: mbennewi@sjf.stjoe.org.
- **Debra Graf**, RN, BSN, CEN, Emergency Department, Community Medical Center, 99 Route 37 W., Toms River, NJ 08755. Telephone: (732) 557-8000, ext. 11925. Fax: (732) 557-2124. E-mail: DGraf@SBHCS.com.

all episodes of a patient's care, from the doctor's office to pre-hospital through hospitalization and discharge.

In reality, most organizations have no EMR, and those that do have one that contains a fraction of a patient's history. The challenge lies in data capture, system compatibility, security concerns, and competition between care providers.

In the future, a unique identifier, verified and authorized by the patient, will be used for each patient. The patient will be in control over who has access to his or her clinical information and to what extent.

In the ED, nurses and physicians will have granted access to the patient's history and be able to update that record on-line. The ED is unique in the health care environment in that often caregivers are forced to make judgments based on very little patient history. By providing access to that history, the quality of care given will improve naturally.

Wireless or handheld devices will give clinicians access to the patient history from any point in the ED. The key to success is not necessarily the technology, but how the data is organized and presented.

ED caregivers do not require detailed notes of office visits or discharge summaries. They need a mile-high view of the patient's history, with the ability to drill down to greater detail on the pertinent portions.

Knowledge-based care also includes increased access to expert information at the point of decision (the point of care isn't necessarily when and where the decision is made). Physicians will have access to patient clinical results, on-line references, and care guidelines when writing orders.

With computerized physician order entry, orders are checked against standards, and suggestions are made while the physician is entering orders. This has been recognized as one of the top priorities in preventing errors in care provision.

• More access to on-line information.

Nurses also will have more access to on-line references. For example, before giving a medication, nurses can verify with their handheld device that the dosage is within accepted profile, that it doesn't interact with other medications, and that it meets the five "rights" of medication administration: The right patient, time, drug, dose, and route. The nurse then can wirelessly print patient instructions.

Bluetooth, a short range radio frequency communications standard that is being implemented for handhelds, laptops and other devices, will allow nurses to access on-line databases, print to a local printer, and communicate via instant messaging from anywhere within 30 feet of another Bluetooth device. *(For more information on Bluetooth, go to www.bluetooth.com/util/faq1.asp.)*

• More rapid communication.

Instant messaging (IM) is growing tremendously in the on-line environment. Popularized by teens who rapidly accepted the technology as a way to communicate with many people at once, it is now achieving acceptance within the business environment.

It is not as intrusive as telephone calls, yet provides instant access to someone. It allows one to see if someone is available or busy, and it reduces communication time by reducing the communication to essentials.

For instance, Doctor A asks a nurse to call Doctor B for him. Doctor A's nurse reaches Doctor B's nurse who has to search for Doctor B, then call him to the phone. Doctor A and B are busy people and have to interrupt their work to get to the phone. Pleasantries are exchanged according to typical telephone courtesy and finally the subject of the call is discussed, then more pleasantries before the call ends.

With IM, Doctor A uses his handheld device into which he is entering patient findings and orders. He has a question that Doctor B might be able to answer. He looks

COMING IN FUTURE MONTHS

- Strategies to ensure your staff are educated about EMTALA
- Effective ideas: You can identify and treat sepsis
- Significantly improve care of patients with abdominal pain
- Dramatically improve the way you assess elderly patients

at his IM application to see if Doctor B is on-line and available, and scribbles a quick question. IM etiquette doesn't require the pleasantries of a telephone call, just as e-mail doesn't require the formality of a letter.

Doctor B glances at his device but is in a conversation. A minute later he scribbles back an answer and continues in his work. The communication is quick, eliminates several steps, and encourages quick consults and communication between care providers.

IM will be important to health care in the future. The main roadblocks are not technology, but acceptance of a new means of communication and etiquette rules — the same issues that were faced with the acceptance of telephones, then voicemail and e-mail.

[Editor's note: Premier Sourcing Partners is a division of Premier, which is an information technology solutions company. Duggan can be contacted at Premier Sourcing Partners, 2320 Cascade Pointe Blvd., Charlotte, NC 28108. Telephone: (704) 733-5753. Fax: (208) 330-7859. E-mail: Brian_Duggan@ PremierInc.com.] ■

Audio conference tackles HIPAA privacy concerns

The recently released final privacy rule under the Health Insurance Portability and Accountability Act (HIPAA) makes significant changes to the existing regulations. With the April 14, 2003, compliance deadline fast approaching, are your staff receiving the proper training?

The American Hospital Association says implementing HIPAA will require "sweeping operational changes" and will take "intense education of hospital workers and patients." To help you and your staff prepare, American Health Consultants offers **HIPAA's Final Privacy Regulations: What You Must Know to Comply**, an hourlong audio conference on Dec. 4, 2002, from 2:30-3:30 p.m. Eastern Time.

Our expert speakers, **Debra Mikels** and **Chris Wierz**, BSN, MBA, will help you understand your responsibilities and identify potential liabilities. All this will allow you to develop a HIPAA compliance strategy with a rationale behind it.

Mikels is corporate manager of confidentiality for Partners Healthcare in Boston. The Partners system includes some of the largest and most respected facilities in the country, including Massachusetts General Hospital, Brigham and Women's Hospital, and Harvard Medical School.

Wierz is vice president of HIPAA and compliance initiatives for Houston-based Healthlink, a health care consulting firm.

The cost of the conference is $299, which includes free CE or CME for your entire staff, program handouts, and additional reading, a convenient 48-hour replay, and a conference CD. Don't miss out. Educate your entire facility for one low price.

For more information or to register for the HIPAA audio conference, please contact American Health Consultants' customer service department at (800) 688-2421 or customerservice@ahcpub.com. When ordering, please refer to code **65151**. ■

Smallpox vaccinations imminent for hospitals

Know the consequences for your facility

The Atlanta-based Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices (ACIP) recently approved a plan that calls for smallpox immunization of 510,000 health care workers.

The plan suggests that all hospitals should designate a "smallpox care team" that will be immunized prior to any release of the virus. The committee recommends that the team include a minimum of 40 health care workers per hospital, with some hospitals vaccinating 100 or more.

To help you prepare for sweeping procedural changes, American Health Consultants offers **Imminent Smallpox Vaccinations in Hospitals: Consequences for You and Your Facility**, a 90-minute audio conference Wednesday, Dec. 11, from 2-3:30 p.m., EST. This session is designed to help you and your staff answer serious questions and prepare your facility for the inevitable. How will being vaccinated affect you?

This panel discussion will be lead by **William Schaffner**, MD, chairman of the department of preventive medicine at Vanderbilt University Medical Center in Nashville, TN.

The cost of the program is $299, which includes 1.5 hours of free CE, CME, ACEP Category I, and critical care credits. You can educate your entire facility for one low fee.

The facility fee also includes handout material, additional reading and references, as well as a compact disc recording of the program for continued reference and staff education. For more information, or to register, call customer service at (800) 688-2421. When ordering, please refer to the effort code: **65341**. ■

CE objectives

After reading this issue of *ED Nursing*, the CE participant should be able to:

1. Identify clinical, regulatory, or social issues relating to ED nursing. (See *Nursing shortage will continue: Make sure your ED stays ahead of the game; Accreditation surveys will never be the same; New, more specific asthma meds are on the horizon; You must brace for change in ED pain management* in this issue.)
2. Describe how those issues affect nursing service delivery.
3. Cite practical solutions to problems and integrate information into the ED nurse's daily practices, according to advice from nationally recognized experts. ■

CE*questions*

17. Which of the following is an effective way to combat the nursing shortage, according to Robin Gilbert, RN, BSN, CEN, ED manager at Central Maine Medical Center?
    A. Reducing in-house training to provide nursing staff with bonuses
    B. Using nurse-to-patient ratios to plan staffing
    C. Decreased use of emergency nurse practitioners
    D. Use of staffing formulas that address acuity and length of stay

18. Which is an example of how surveys will change, according to the Joint Commission on Accreditation of Health Care Organizations?
    A. Greater focus on critical patient care issues.
    B. Greater emphasis on survey scores.
    C. Surveys will vary according to region.
    D. Additional documentation will be required.

19. Which of the following is recommended for management of asthma patients, according to Lee M. Trexler, RN, research nurse for the department of emergency medicine at Metro-Health Medical Center?
    A. Avoiding use of levalbuterol
    B. Performing pulmonary function tests before the first aerosol treatment
    C. Avoiding use of advair
    D. Collecting pre-treatment peak flows instead of forced expiratory volume at 1 second (FEV1)

20. Which of the following is recommended for pain management, according to Paula Tanabe, RN, PhD, CCRN, CEN, research coordinator and research assistant professor for the division of emergency medicine at Northwestern Memorial Hospital & Feinberg School of Medicine?
    A. Administering cyclooxygenase (COX)-2 specific inhibitors instead of ibuprofen
    B. Use of oral analgesics containing acetaminophen and hydrocodone for patients who require stronger analgesics upon discharge
    C. Avoiding use of dilaudid
    D. Increased use of meperidine

Answers: 17. D; 18. A; 19. B; 20. B.

UCI Medical Center
Emergency Department

Welcome to UCI Medical Center's Emergency Department. Since you are probably here for an illness affecting yourself or a family member, we know this may be a stressful time. We want to care for you and your loved ones and will do our best to make you feel better. This pamphlet will answer some of your questions about emergency care and tell you what to expect during your visit with us today.

General Information

UCI Medical Center (UCIMC) is the only Level I Trauma Center and Burn Center in Orange County, meaning it treats the county's most severely injured people. Doctors specializing in every medical field, with access to state-of-the-art medical equipment, practice within the Medical Center.

The Emergency Department at UCIMC sees approximately 120 patients each day and provides medical care 24 hours a day, every day of the year. There is a Chest Pain Unit within the Emergency Department to help the staff determine if you are having a heart problem.

Commonly Asked Questions

• Where should I park?
Thirty-minute parking is available at the end of the building next to the ambulance ramp. Additional parking is located across from the ramp next to the parking structure. As soon as you arrive in the Emergency Department Waiting Room, ask the Greeter at the desk or one of the Security Officers for a Parking Permit. Once you receive it, place it on the dashboard of your car.

• What should I expect from the Emergency Department visit?
Upon entering the Waiting Room, you will be welcomed by a Greeter who will notify a Triage Nurse of your arrival. The Triage Nurse is a Registered Nurse who is specially trained to ask questions about your medical condition and determine the seriousness of your illness or injury. It is important to note that patients are seen based on their medical condition, determined from this assessment, not on their order of arrival.

Once the Triage Nurse completes the Medical Screening Exam, a Registration Clerk will obtain your personal and financial information. Upon completion of the registration process, you may be asked to be seated in the Waiting Room until a bed is available. When you go back to the Emergency Department, you will be cared for by a Registered Nurse and one or more doctors. During your visit, lab work, X-rays, and medication may be ordered to help the staff treat you.

• Is there a phone available so I can call my friends and family?
Yes. There are two pay phones in the Waiting Room. We can also bring a phone to the patient's bedside in the Emergency Department for local calls.

• How much time will my visit take today?
This will depend upon how many patients are in the Emergency Department and how sick you are. As stated before, UCIMC is the only Level I Trauma Center and Burn Center in Orange County. While this may extend your visit with us, it will not affect the quality of care. If your care requires blood tests, X-rays and consultations with other specialists, more time may be needed. If you have commitments later in the day, ask your nurse or doctor for an estimate of your visit time. On average though, the shortest visit is 1-2 hours. The longest can be 6-8 hours if your illness is very complicated.

• What if I have to leave before being seen by a doctor?
If, for some reason, you must leave the Emergency Department before you are seen by the doctor, you must notify the nurse or clerk at the front desk. The risks of leaving include worsening of your condition, which could lead to permanent disability or death. If you have questions about your condition, and the risk of leaving, please ask the nurse or physician.

• Where can I get something to eat or drink?
If you are a patient waiting to be seen by the doctor, please see the Greeter before you eat or drink anything. The Greeter will contact one of our Registered Nurses to see if it is OK. If you are not a patient, or if the nurse says you can eat, there are two vending machines located in the Waiting Room. You also can go to the Cafeteria, which is open Monday–Friday from 6:30 a.m.–10:30 a.m. and 11 a.m.–3:30 a.m. and on Saturday and Sunday from 8 a.m.–10:30 a.m. and 11 a.m.–3:30 a.m. Please see the Greeter or your nurse for directions to the Cafeteria.

• Do you have anything to help keep me and/or my kids busy while we wait?
Yes. We have two televisions in the Waiting Room. We have videos available for viewing in the Pediatric Waiting area. We also have an assortment of magazines for adolescents and adults and a variety of books, coloring books, crayons, and puzzles for children. Please see the Greeter to view one of the videos, get one of the magazines, and children's books, crayons, and puzzles.

• Is UCI Medical Center a county hospital?
No. Orange County does not have a county hospital. UCIMC is operated by the University of California whose mission is "To provide high quality patient care in a manner that supports the education and research programs of the College of Medicine."

• Will my HMO or insurance company cover the cost of my visit today?
If you have a health care plan, they may want you to go to their preferred provider or contracted hospital. The process of deciding whether they will pay for your visit today is called authorization. We will call your plan to let them know why you are here. Your plan may authorize or deny payment for the visit. If your health care plan does not authorize your visit, we will still see you in our Emergency Department and provide emergency care, but your plan may not pay the bill.

• I do not have money or medical insurance. Can I still be seen for my problem?
Absolutely yes. Every Emergency Department is required by law to treat all patients who come for emergency care. The Registration staff can answer any questions you have about how to pay for your treatment today.

• I do not speak English. Does UCI Medical Center have interpreters?
Yes. UCIMC has Spanish interpreters 24 hours a day and has Vietnamese interpreters on weekdays. Our interpreters try to be in the Emergency Department for our patients. However, they may not always be available right away. We recommend that if you cannot speak English, bring a friend or family member who does.

• I am not in the United States legally. Will I be reported?
No. By law, we must treat all emergency or life-threatening problems. We do not discourage anyone from coming to the Emergency Department for fear of resident status.

• Everyone asks me for the same information. Don't you talk to each other?
There are many people caring for you today. Each person has a different job and need for information. We want to provide you with the best care possible, and asking questions is the best way for us to find out how to help you. It may seem repetitive, but we do not want to miss anything.

• What questions will the staff ask me?
We will ask you many questions to find out why you are here and how we can best help you. We will ask you what medical problems you know about (high blood pressure, arthritis, or asthma, etc.) and what operations you have had (appendectomy, gallbladder removal, etc.). We will also ask what medication(s) you are taking and if you have ever had any bad reactions to any medication. Please bring your medication(s) with you to the Emergency Department.

• Will my regular doctor be called today?
If you have a doctor in the UCIMC family of doctors, we will call him or her. We do this to discuss your treatment with the doctor who knows you best. If you have another doctor you would like us to call, please let the Emergency Department staff know right away.

• Why will I be asked to take off part, or all, of my clothing and put on a gown after going into the Emergency Department?
It is very important for the doctors and nurses to be able to conduct a thorough examination. Once you have removed your clothing, please place it into a white Patient Belongings bag to help keep it all together. A staff member will provide you with a label to place on your Belongings bag. We encourage you to give your valuables (wallet, watches, jewelry, etc.) to a family member for safekeeping. Please note, in an emergency, your clothing may have to be cut off in order to evaluate you appropriately.

• My doctor said he/she is an Intern or Resident. What does this mean?
Interns and Residents are medical doctors who have finished medical school and are learning their specialty, including Emergency Medicine. At UCIMC, part of our mission is to train young doctors. These doctors are a very important part of your care. While you may talk mostly with an Intern or Resident during your Emergency Department visit, your care is always discussed with an Attending Emergency Physician (Chief Emergency Physician) before we treat you or order any tests. Before you leave the Emergency Department, you will be seen by the Attending Emergency Physician.

• Can I have visitors while in the Emergency Department?
Usually. One visitor can stay with you if we are not doing tests at that time. In fact, it is important that an adult stay with a child who is treated in the Emergency Department. We try to keep visitors to one per patient because we have limited space. Limiting the number of people in the Emergency Department also helps us protect our patients' privacy and gives the staff enough space to perform their duties quickly. When the Emergency Department is busy, or if we have to perform a procedure, we may ask the visitors to wait in the Waiting Room.

• How can visitors come see me while I am in the Emergency Department?
For your safety and the safety of our other patients and staff, access to the Emergency Department is strictly regulated. Your visitors can check in with the Greeter in the Waiting Room. The Greeter will then talk with your nurse and ask him/her to let you know they are here. Depending on your treatment and how busy the Emergency Department is, your nurse will determine when it is best for your visitors to visit with you. Once granted permission to enter the Emergency Department, all visitors must use the main entrance since all other entryways are securely locked.

• Will I need to be admitted to the hospital?
This will be determined after a thorough examination by one of our doctors. Patients admitted to the hospital need tests or treatments not done in the Emergency Department. Examples are infections needing IV antibiotics or patients who might have had a heart attack or need surgery. Most patients seen in the Emergency Department do not need to be admitted to the hospital.

• If my doctor tells me I should have a test, do I have to have it done?
All tests requested by the Emergency doctors are used to find out what is wrong with you and how best we can treat your illness. Please ask your doctor to tell you why we are recommending a test and explain the risks and benefits to you. You may refuse any treatment or test. However, if you do, we may not be able to decide what is wrong with you. Occasionally, some patients may be too sick to make decisions about their treatment. When this happens, we do the tests we think will help these patients.

• My doctor told me he/she does not know what is wrong with me after my treatment. What does this mean?
In the Emergency Department, our first goal is to treat life-threatening illness and pain. We do not do many tests for illnesses that are not emergencies and may not be able to tell you why you feel sick today. This does not mean we think there is nothing wrong with you. Instead, we have determined that your illness is not life-threatening or requiring hospitalization. Your illness may need more tests and long-term care than we are able to provide in the Emergency Department. It is important that you go to your doctor or clinic appointment after leaving the Emergency Department so they may continue to treat you. When you leave, we will give you clinic phone numbers to make an appointment.

We, in the Emergency Department, will do our best to make your wait as short as possible. We truly appreciate you choosing UCIMC as your health care provider. Your well-being is important to us. Please feel free to ask questions or offer suggestions on how we can make your visit to our Emergency Department more pleasant. During your visit, you will receive a Patient Satisfaction Feedback form. We would appreciate it if you would take a few minutes during your visit and complete the form giving us your opinion about your visit. Thank you.

Source: University of California-Irvine Medical Center, Orange.

EMERGENCY SERVICES
EMPLOYEE OF THE MONTH NOMINATION FORM

Date: _____

Nominee / Nominee's Department: _____ / _____

Nominator / Nominator's Department: _____ / _____

Primary criteria met for nomination (√):

- ☐ Take action to meet customer's needs
- ☐ Use the 4 E's of communication (Engage, Empathize, Educate, Enlist)
- ☐ Involve patient in decisions
- ☐ Protect confientiality and privacy
- ☐ Communicate about delays
- ☐ Be cheerful and professional
- ☐ Create a clean a safe environment
- ☐ Avoid personal conversations in front of patients

Describe event: _____

_____

_____

_____

Source: University of California-Irvine Medical Center, Orange.