AMERICAN HEALTH CONSULTANTS®

See p. 94 for special teleconference offer for *EDM* subscribers

ED Management®

The monthly update on Emergency Department Management

Vol. 13, No. 8

Inside

Inserted in this issue:
Code Yellow Institutional Disaster Plan

August 2001

Are you prepared for terrorist attack? New report tells how to train ED staff

Experts: Many EDs have 'almost no preparation' to treat victims

Would you be able to identify an outbreak of smallpox that was a result of a biological terrorist attack — before it spread throughout your community? Could your ED decontaminate dozens of people if a chemical spill occurred in your city? Does your staff know how to protect themselves to avoid being injured by contaminated patients?

If you answered "no" to these questions, you're not adequately prepared for a nuclear, biological, or chemical (NBC) incident, according to **Robert Schafermeyer**, MD, FACEP, president of the Dallas-based American College of Emergency Physicians (ACEP) and associate chair for the department of emergency medicine at Carolinas Medical Center in Charlotte, NC.

A new report from ACEP and the Department of Health and Human Services' (HHS) Office of Emergency Preparedness gives you a "benchmark" to prepare ED staff for NBC incidents, with specific training objectives. **(See resource box for information on obtaining the complete report, p. 88.)**

"This is the first comprehensive report on training for ED physicians, nurses, and the EMS community," explains Schafermeyer. Performance objectives include event recognition, safety and protection, decontamination, triage, and treatment.

You should be familiar with the report's recommendations to prepare for NBC incidents, he urges. "ED managers will be the ones to initiate training

Executive Summary

A new report from the American College of Emergency Physicians and the Department of Health and Human Services gives specific training objectives for ED staff to prepare for casualties of nuclear, biological, or chemical (NBC) incidents.

- Courses tailored to the objectives will be available in approximately one year.
- You should include decontamination scenarios in disaster drills.
- Be certain that NBC incidents are addressed in your hospital's disaster plan.
- Provide adequate training for staff with an instructor who has been trained by the Department of Defense or has undergone training in hazardous materials.

across America, so communities can respond effectively to these kinds of disasters," says Schafermeyer.

The potential number of casualties from a biological attack may be staggering, he warns. "In fact, an attack on a major city could approximate the lethality of a small nuclear explosion," Schafermeyer says. "Only if victims can be identified and treated quickly can the number of deaths be decreased."

Unfortunately, most EDs are still poorly prepared for NBC incidents, stresses **Robert Suter**, DO, MHA, FACEP, senior medical director for Questcare Emergency Services, a 13-hospital group serving the Dallas-Fort Worth area.

"The most common misconception is that it's impossible to prepare for these events," he says. "You absolutely can."

You'll need to make sure your training programs incorporate the information in the report, says Suter. "Just by reading the report, you will be stimulated with ideas to update or correct your disaster plans," he adds.

Some EDs have almost no preparation at all for decontamination on a large scale, reports Schafermeyer. "Although some hospitals have treated victims of chemical exposure, very few are prepared to treat 40, 100, or several thousand patients from a terrorist attack in a congested urban area," he notes.

Even fewer are prepared for biological terrorism, especially if the number of victims is extensive, says Schafermeyer. *(For more information about preparation for terrorist attacks, see ED Management, November 1999, p. 121.)*

Here are ways to comply with the report's objectives and improve preparedness:

• Include instructions for NBC incidents in your disaster plan.

Suter advises addressing NBC incidents within your overall disaster plan, with "add-ons" for these specific scenarios.

"The process of dealing with NBC events is identical to others, with the exception of personal protective equipment, decontamination equipment, and antidotes," he explains. **(See Code Yellow Institutional Disaster Plan, enclosed in this issue.)**

• Make sure that staff practice decontamination.

Disaster drills need to include a decontamination scenario, advises **Robert Takla**, MD, FACEP, medical director of emergency services at St. John NorthEast Community Hospital in Detroit.

"The situations often pose unique, inherent challenges that do not pertain to other disasters, such as the establishment of a decontamination reduction zone and a buffer zone, and their proper use," he says.

Recently, the ED held a drill with patients contaminated by organophosphate, with Takla notified of the approximate time so he could be available. "As soon as we got the call, we called the code, set up our decontamination tent, donned the proper equipment, and began," he says.

Putting on the protective gear and practicing decontamination procedures helped staff a lot, says Takla. "ED personnel learned to don the personal protective equipment faster and more easily. We did have one security person step into the hot zone, and subsequently he became contaminated and a patient himself."

Stepping back to protect yourself with use of personal protective equipment is difficult to do under pressure, notes Takla. "It is contrary to the habit of working under the premise that seconds count," he notes.

Takla acknowledges that a real disaster will be much more chaotic, challenging, and unpredictable than any drill. "Nevertheless, every drill is a practice session, and we learn something valuable each time," he says. "We work better as an effective, cohesive team each time we practice, and that is very important when responsibility is delegated out as in a mass casualty situation."

• Be realistic when developing strategies.

Avoid impractical strategies with difficult or costly requirements, advises **William Dalsey**, MD, MBA, FACEP, an ED physician at Robert Wood Johnson University Hospital in New Brunswick, NJ. "For example, many EDs would be well-served by using the fire department pumper trucks to provide water for decontamination of large numbers of patients," he notes.

• Have staff trained immediately.

Courses that specifically address the objectives in the report are being developed, reports Schafermeyer. "It's possible that a curriculum could be available next year," he says.

Until the planned courses are available, have an instructor trained by the Department of Defense or who has undergone training in hazardous materials provide appropriate inservices and continuing education, Suter

COMING IN FUTURE MONTHS

- Dramatically reduce patient call volumes
- Effective incentives for nursing staff
- Boost bottom line with point-of-care testing
- Use hand-held computers to improve patient care

recommends. "A good source of information on finding local experts and instructors is your local fire department," he notes.

Accept the fact that this training will take more than a few hours, usually several days, and plan accordingly, Suter says. "The report states that the primary obstacles to training are funding and time constraints," he notes.

• Prevent secondary contamination.

Most EDs are unprepared to decontaminate large numbers of patients, according to Dalsey. **(See Excerpt from HazMat Patient Decontamination Response Plan, below.)**

HazMat Patient Decontamination Response Plan: Security/Emergency Departments (Excerpt)

PROCEDURE:

Medical personnel must protect themselves and other patients from potential exposure to hazardous substances before providing initial care of contaminated patients.

The Administrative Director/Patient Care Coordinator or designee directs the:

A. ED personnel involved in the decontamination of the patient to:

1. Report to triage for baseline vitals. Obtain personal protective equipment (PPE) supplies from the designated, locked storage area.
2. Check suit for leaks and zipper integrity.
3. Remove all jewelry, wallets, and valuables, prior to donning PPE and secure in personal locker.
4. Don chemical-resistant suit over boots.
5. Place pant leg over top of boots. Depending on the type of equipment used, secure with chemical resistant tape if necessary.
6. Don non-sterile latex or vinyl gloves (elastic of chemical suit is placed over the gloves).
7. Apply respiratory and face/eye protection.
8. Pull up hood of chemical-resistant suit and secure in place.
9. Seal hood and zipper of suit with chemical-resistant tape.
10. Apply nitrile rubber gloves over outside of suit and seal with chemical-resistant tape.

B. Plant Operations will:

1. Place plastic sheeting in area proximal to contamination area and secure area with hazard tape as directed by ED physician to protect area from contamination, if necessary.
2. Secure additional Hazmat supplies from the decontamination reduction zone (DRZ), such as salvage drums and linen cart.

C. Environmental Services will:

1. Environmental Services will bring an additional linen cart to the ER treatment area.
2. On the midnight shift, weekends, and holidays, Environmental Services will initiate setting up decontamination tent.

D. Security Officers will:

1. Divert all traffic from the contaminated area.
2. Secure additional areas with hazard tape as necessary.

E. Patient:

1. The patient(s) will not enter the ED until they have been decontaminated.
2. If the patient(s) arrive to the ED unannounced, security will prevent the patients from entering the hospital until the DRZ is prepared for the patient.
3. If the patient(s) is still in a private vehicle and is known to be contaminated, the patient should be held in the vehicle until the DRZ is prepared. Note: If the patient(s) is in a life-threatening situation and requires immediate attention, ED staff with proper PPE should begin treatment in the ambulance, and an emergency decontamination should be performed.
4. Patient's clothing should be removed in the ambulance (if not already removed at the scene). Note: The greatest portion of contamination is usually found on the patient's shoes and clothing. Prompt removal of garments at the scene greatly reduce the amount of product the patient(s) and rescuers are exposed to.
5. Clothing should be placed in a clear plastic bag and labeled with the patient's name and marked contaminated. Jewelry and other valuables should be placed in a zip-lock bag and labeled accordingly. All items may be returned to the patient(s) if the product is determined to be non-toxic. If the substance is deemed toxic, all items will be disposed of with the exception of jewelry and other nonporous items such as credit cards.
6. Patient(s) should be covered with a disposable blanket and advanced to the DRZ.
7. Patient(s) should enter shower area. ■

Source: St. John Northeast Community Hospital, Detroit.

In hazardous material or weapons-of-mass-destruction incidents, all patients must first go through the decontamination reduction zone to be decontaminated properly before being allowed to enter the ED, says Takla.

All medical personnel must protect themselves and other patients from potential exposure to hazardous substances, before providing initial care to contaminated patients, urges Takla.

"This is not the usual patient encounter most ED health providers are used to," he says. If these protocols are not followed, the health provider may become a contaminated patient and possibly could contaminate others in the process, Takla warns.

Dalsey adds, "Practicing the plan, so that everyone follows the protocols that provide for decontamination, clean areas, and use of personal protective gear, can help avoid such incidents." ■

Sources/Resources

For more information about disaster planning, contact:

- **William Dalsey**, MD, MBA, FACEP, Robert Wood Johnson University Hospital, 1 Robert Wood Johnson Place, New Brunswick, NJ 08903. Telephone: (732) 937-8944. Fax: (732) 828-3000. E-mail: Dalseyw@nj.medamerica.com.
- **Robert Suter**, DO, MHA, FACEP, Questcare Emergency Services, 101 E. Park Blvd., Suite 921, Plano, TX 75075. Telephone: (972) 881-8353. Fax: (972) 422-2208. E-mail: r.suter@questcare.com.
- **Robert Takla**, MD, FACEP, Emergency Services, St. John NorthEast Community Hospital, 4777 E. Outer Drive, Detroit, MI 48234-3281. Telephone: (313) 369-5689. Fax: (313) 369-5582. E-mail: rtakla@mediaone.net.

The full report *Developing Objectives, Content, and Competencies for the Training of Emergency Medical Technicians, Emergency Physicians, and Emergency Nurses to Care for Casualties Resulting From Nuclear, Biological, or Chemical (NBC) Incidents* from the American College of Emergency Physicians and the Office of Emergency Preparedness can be downloaded free of charge at ACEP's web site (www.acep.org). Click consecutively on "EM Practice," "EMS," and "NBC Final Report." Or to order a free copy, contact:

- **Matthew Payne**, Office of Emergency Preparedness, 12300 Twinbrook Parkway, Suite 360, Rockville, MD 20852. Telephone: (301) 443-3115. Fax: (301) 443-5146. E-mail: mpayne@osophs.dhhs.gov.

GUEST COLUMN

How to handle abusive colleagues

By **Larry B. Mellick**, MS, MD, FAAP, FACEP
Chair and Professor Department of Emergency Medicine Section Chief, Pediatric Emergency Medicine
Medical College of Georgia
Augusta

(Editor's note: All names have been changed for this article.)

"You aren't going to believe what happened last night," said Rebecca Roberts, a new emergency medicine attending. "I was inquiring about the procedure for cervical spine X-rays, and the radiology attending, Dr. Christopher, became very irate."

Rebecca, who was nine months pregnant, described how Dr. Christopher had put his hand on her shoulder, pushed her against the view boxes, and cursed at her with his face six inches from hers.

Even though her inquiry had been innocent, tension already had been developing between radiology and emergency medicine over the management of patients with trauma-related neck pain.

The medical director, Dr. Renae, was concerned about a number of issues. The behavior of Dr. Christopher seemed even more incomprehensible when Dr. Roberts' pregnancy was considered. There also was concern that this might be the bellwether of an emotional health issue or personal life stress.

Furthermore, she recognized that Dr. Christopher's actions were legally consistent with assault and battery. Besides failing to show proper etiquette to the new emergency attending, the older radiologist was potentially in deeper trouble because of his actions. In that the event was just one of several recent verbal attacks and displays of aggression against emergency medicine staff, Dr. Renae recognized that a strong response was indicated.

First, the chairman of radiology was contacted by telephone and requested that a meeting be scheduled immediately between the two doctors as well as the chairs of the two departments.

Within 24 hours of the event, Dr. Roberts decided to make a police report of the incident. Dr. Renae

supported this decision. While she wanted to preserve the overall good relationship between the two departments, an investigation of the event by the police seemed to match the seriousness of the offense.

Subsequently, Dr. Roberts decided not to press charges against Dr. Christopher. During the meeting, the radiology attending offered his apology personally and in a formal letter to Dr. Roberts. Dr. Roberts was satisfied with the outcome of the meeting, and no further problems with Dr. Christopher were experienced during the next several years. On the other hand, how radiology technicians managed neck pain was a little more difficult and slower problem to resolve.

Strong response is needed

One month before this incident, one of the surgical fellows, Laurence Davis, had arrived in the ED in a foul mood. He was upset that the ED attending had placed a chest tube before his arrival. Dr. Davis began by picking up and slamming down books on a counter and then throwing papers and objects onto the floor. The ED staff was convinced that someone was going to be hurt, and one staff member started to call the police. Fortunately for Dr. Davis, things to throw had become scarce before the telephone call could be made.

The chairs of emergency medicine and surgery met with Dr. Davis, who formally apologized for losing control. (Although a promised formal apology to the ED attending is still pending years later, Dr. Davis has displayed no additional outbursts of uncontrolled anger.)

The following week, the chair and medical director of the ED met to discuss the implications of these events. It was clear that various colleagues were subjecting ED staff to a pattern of abuse, and departmental morale was being impacted adversely. A strategy was needed to interrupt this pattern.

According to the hospital lawyer, most of the events that occurred against the ED staff were consistent with the legal definition of battery. In each case, individual staff members had reported that they felt threatened physically by the angry outburst. The chief of security agreed that his staff would respond promptly if called during any future events. A policy was established that a police investigation would be expected following any future events.

The ED chairman sent a letter to the chief of staff at the hospital detailing each of the recent events. He was subsequently invited to present his concerns at a medical staff executive meeting, where a resolution was passed for a "zero tolerance" policy for any verbal or physical assaults toward ED or other hospital staff members.

Finally, a training format was established to allow the ED staff to more effectively manage rage behaviors. As soon as an outburst event was noted, as many as five staff members would quietly appear to flank the person from the front and both sides. One staff member taking a lead communication role would quietly ask the offending individual to lower his or her voice and to bring the behaviors under control. This formation was intended to protect the unfortunate individual receiving the verbal assault, as well as deliver the strong message that comes from being surrounded and outnumbered.

While no one knows for sure, there seems to have been a direct association between the strong measures taken and the fact that no further assault episodes against ED staff members have occurred in the subsequent four years.

[Editor's note: Contact Mellick at Medical College of Georgia, Department of Emergency Medicine, 1120 15th St., AF 2036, Augusta, GA 30912-2800. Telephone: (706) 721-7144. Fax: (706) 721-7718. E-mail: LMELLICK@mail.mcg.edu.] ■

Follow up with patients by telephone

When an elderly man came to the ED at Bay Pines (FL) VA Medical Center complaining of atypical chest pain and shortness of breath, he left without being seen.

"He decided he couldn't stay because his wife was ill at home. He didn't even stay for the lab work," recalls **Susan Schaeffer**, RN, the ED's telephone care program nurse.

When the patient was called the following morning, the chest pain had intensified. "He was very worried about his wife, and it was arranged for a neighbor to

Executive Summary

Giving patients a follow-up telephone call can improve satisfaction, improve outcomes, and even save lives.

- Patients who left the ED without being seen can be encouraged to return if the problem has persisted or worsened.
- The nurse who makes the follow-up calls should be trained in giving advice over the telephone and be a good listener.
- Patients react positively to receiving follow-up calls.

be with her. He agreed to come back in and had a massive myocardial infarction with a troponin level of 34," Schaeffer reports.

Making a brief follow-up telephone call potentially can save a patient's life, she notes. "The phone calls help encourage patients to get the care they need," she says. **(See checklists of patients to call, opposite bottom; what to say, opposite top; and information on how to track calls, p. 91.)**

Here are ways to provide effective telephone follow-up with patients:

• Have a specific nurse make follow-up calls.

At Bay Pines, a nurse works Monday through Friday to contact patients who left the ED without being seen, says **Marcia Berry**, RN, BSN, nurse manager for ED, triage, and occupational health.

If possible, telephone follow-up should not be combined with ED clinical responsibilities, advises Berry. "When the nurse is not here, follow-up is missed on some patients, since it's everyone's second priority to do that," she acknowledges. 'If other things come up, that seems to be the first thing to go."

After the call, the nurse documents why the patient came into the ED and why he or she left without being seen, says Berry. "Most of the time, we found it's because the patient does not view their illness as seriously as it's perceived by the medical staff," she notes.

It also helps if the nurse doing the follow-up calls is impartial, says Berry. "ED staff tend to be more defensive and don't have an objective view," she says. "Also, if the patient knows they are talking to an ED staff member, they may be reluctant to give an honest response."

The person doing the call-back should be a good listener, non-argumentative, and experienced in giving advice over the phone. "A skilled triage nurse is probably the best person to do this," advises **Laura J. Roepe**, RN, MA, CEN, quality systems analyst for United States Surgical/Tyco Healthcare and former administrative manager of the ED at Norwalk (CT) Hospital.

However, this isn't always feasible because of the time it takes to do the call-backs and the volume of patients being triaged, she acknowledges. In this case, Roepe recommends assigning a nurse on light duty, delegating the call-backs as an additional charge nurse duty, or providing incentives such as extra pay for a nurse to make the call-backs.

• Make sure the episode is resolved.

Sometimes the problem the patient came to the ED with is still present or has intensified, says Schaeffer. "If the patient came in because of chest pain, and decided to leave before being admitted to the coronary unit, they may still be having pain," she notes.

Tips for Follow-up Phone Calls

When following up with patients by telephone, you should cover the following topics:

☐ General well being of the patient.
☐ Confirmation of follow-up instructions.
☐ Clarification, if needed, on discharge instructions.
☐ General impression of ED visit.
All specific complaints or comments are noted and given to the manager for follow-up.

For patients who leave without being seen or against medical advice:

☐ General well being of the patient.
☐ Was treatment obtained elsewhere?
☐ Why did they leave?
☐ Offer the services of the ED again today. (Would they like to return?) ■

Source: Laura J. Roepe, RN, MA, CEN.

Make Follow-Up Calls to These Patients

Consider providing telephone follow-up for patients discharged with the following diagnosis or symptoms:

- Left Without Being Seen (as long as they had registered and a valid phone number was provided);
- Left Against Medical Advice;
- Left Without Treatment Completed;
- Physician/Nurse Request;
- Children Younger Than Age 5 with a temperature more than 102˚ F;
- Abdominal Pain;
- Vaginal Bleeding;
- Chest Pain;
- Significant Head Injury;
- Headache;
- Seizure;
- Allergic Reactions;
- Accidental Overdose or Ingestion;
- All children under age 1;
- All adults over age 70;
- Change in Diagnosis/Treatment/Discrepancies in Test Results (Physician Assistant calls these patients). ■

Source: Laura J. Roepe, RN, MA, CEN.

Many patients are reluctant to come back to the ED after signing out, Schaeffer says. "If so, we can educate the patient, and encourage them to ask someone to drive them in or call 911," she says.

• Consider patient satisfaction.

You may be surprised at how patients react when you call, says Schaeffer. "In general, the patient's mouth drops when you identify yourself and tell them that you are calling as follow-up and just want to find out how they are doing," she says. "I think it is one of the best ways to let them know that we do care."

Telephone follow-up is a boon for public relations, says Roepe. "The message of 'we care' is instantly generated just by the phone call," she adds.

It's also a good way to find out if patients are happy with the care they received in the ED, especially from individuals who may not take the time to complete a written survey, notes Roepe.

"Virtually everyone I have called back was happy to have the chance to talk to someone from the hospital, get questions answered, and if necessary, vent a little about the care they received," she says.

3 ways to track follow-up calls

Here are three effective ways to document that follow-up calls were made, recommended by **Laura J. Roepe**, RN, MA, CEN, quality systems analyst at United States Surgical/Tyco Healthcare and former administrative manager of the ED at Norwalk (CT) Hospital:

1. The actual chart can be pulled and a note made on the chart indicating a follow-up phone call was made.

2. A logbook can be kept with all pertinent information related to the follow-up call. This is useful because other staff can note in the book those patients they wish to be called back, regardless of whether they meet the diagnosis/symptom criteria, says Roepe.

3. A database can be made specifically for call-backs. The database can be linked to the registration system and automatically pull out the patients who meet the criteria for a call-back and have it ready for the next day, says Roepe.

The call then is entered into the computer. All attempts at calls are also logged into the computer. There are two attempts made on two consecutive days to contact the patient. ■

Sources

For more information, contact:

- **Marcia Berry**, RN, BSN, Bay Pines VA Medical Center, PO Box 5005, Bay Pines, FL 33744. Telephone: (727) 398-6661. Fax: (727) 398-9557.
- **Laura J. Roepe**, RN, MA, CEN, United States Surgical/Tyco Healthcare, 195 McDermott Road, North Haven, CT 06473. Telephone: (203) 492-6334. Fax: (203) 492-6661.
- **Susan Schaeffer**, RN, Bay Pines VA Medical Center, PO Box 5005, Bay Pines, FL 33744. Telephone: (727) 398-6661 ext. 7437. Fax: (727) 398-9557.

Even patients who leave without being seen are responsive, she reports. "Many take up the offer of returning that day to 'try again' because they now have a name they can drop to expedite the process," she says.

• Educate patients.

Some patients admit to Schaeffer that they were out of a drug and thought coming to the ED was the best way to get it.

"They may say they have a headache, but it wasn't urgent, and they got tired of waiting so they left," she says. "I can educate them and explain that a better way would have been to call the pharmacy." ■

WEB ALERT

Site offers up-to-date clinical solutions

Are you tired of long-winded, frustrating Internet searches when you need specific information to solve a clinical problem? EM Guidemaps is a unique web site created by an ED physician, with the goal of providing clinicians with problem-solving information for acute clinical conditions in a hurry.

"A neophyte ED physician always needs to have 'quick-to-read' medical information constantly available," argues **Jeff Mann**, MD, an attending ED physician at a community hospital, who developed the site that features 49 guidemaps. "There is often insufficient time to search for medical information in the classic textbooks of emergency medicine."

The free "eMedicine World Medical Library" site

Vital signs
Site: Jeff Mann's EMguidemaps
Address:
http://emguidemaps.homestead.com/JeffMannEMguidemaps.html

(www.emedicine.com) was the inspiration for Mann's web site. "The on-line textbook provides up-to-date medical information in a very easy-to-read format. It is the model that gave rise to my own idea of a practical emergency medicine guidemap site," he says.

Mann created the web site after he suffered "burnout" from 20 years of full-time ED practice. He notes that the guidemaps, although researched comprehensively, are not peer-reviewed or edited.

The guidemaps do not supply enough information to answer complex clinical questions, which require a detailed medical literature search, he cautions. "My guidemaps are designed to be problem-solving tools, and they are not designed to act as mini-emergency medicine textbooks." He adds that the guidemaps are updated immediately if Mann learns of any new information that is relevant to the topic.

The guidemaps are diagnosis- and symptom-based, and include advanced cardiac life support, resuscitation, medical, neuro-opthalmological, obstetrical-gynecological, toxicology, trauma, anatomy, and EKG interpretation topics.

Mann chooses subjects that are especially challenging, such as neurological cases, or difficult to remember, such as toxicology cases. "I will probably not cover many common diseases, such as pneumonia, or topics that require extraordinary expertise," he notes.

The guidemaps can be useful in "real time" ED practice, if clinicians take the time beforehand to familiarize themselves with the content, says Mann. "If you quickly review their contents, you can later refer to them when you need to rapidly look up medical information without wasting too much time," he explains. ■

Sources

For more information about EMGuidemaps, contact:

- **Jeff Mann**, MD, Telephone: (908) 832-0864. E-mail: jmannemg@earthlink.net.

EMTALA Q & A

Question: There are two hospitals within the same foundation, approximately 40 miles apart. The smaller hospital has limited bed capacity. What guidelines must be followed for transfer of patient from one ED to the other?

Answer: If the smaller hospital is operating as a remote campus of the larger hospital under one license and Medicare provider number, then policies and procedures must exist for medical screening and stabilization at the smaller hospital, consultation with the larger ED, and appropriate medical transport of patients between the two sites, says **Stephen Frew**, JD, president of the Rockford, IL-based Frew Consulting Group, which specializes in compliance with the Emergency Medical Treatment and Active Labor Act (EMTALA).

"I would recommend that full EMTALA compliance be observed for documentation, even with the issue being one of bed availability, just so the situation is adequately documented as meeting patient safety requirements," he adds.

Frew notes that if the hospital is licensed separately, then it cannot be provider-based, and every movement of the patient between the two related hospitals is governed by EMTALA concepts. "Lack of beds may be a bona fide reason to transfer, but full documentation will be required, just as if sending to an unrelated facility," he says.

Question: A facility transfers four types of patients after initial medical care: patients requiring invasive cardiac procedures, and neurosurgery, multiple-trauma, and high-risk OB patients. Could you please give an example of proper documentation for risk and benefits for these patients?

Answer: There are no magic words to use for documentation to pass muster, nor is a lengthy manuscript required, says **Jonathan D. Lawrence**, MD, JD, an ED physician and medical staff risk management liaison at St. Mary Medical Center in Long Beach, CA.

What is required is sufficient documentation to allow a reviewer to easily understand why the transfer to another institution is necessary, he explains. "Remember that this certification of risks and benefits is required only for those patients who are being transferred in a non-stabilized state," he adds.

In other words, the certification is required when the transferring institution has provided care to the best of its capabilities to minimize the risk to the patient, yet additional care is required elsewhere to

complete the stabilization process, says Lawrence.

"All four classes of patient transfers cited in the question are typical of patients that require a high level of care, often at tertiary centers," he notes.

He offers the following sample phrases to use for each condition:

• Neurosurgical (subdural hematoma, for example).

Benefit: Surgery to evacuate hematoma.

Risk: Severe disability or death.

• Invasive cardiac patient.

Benefit: Myocardial salvage, improved cardiac output.

Risk: Severe disability or death.

• High-risk pregnancy.

Benefit: Improved chance of survival of fetus and/or mother.

Risk: Death or disability of child and/or mother.

• Multiple trauma.

Benefit: Improved chance of survival or salvage of (arm, leg, etc.).

Risk: Loss of limb, function of (limb, eyesight, etc.), death.

Lawrence also notes that the patient or the patient's representative must agree with the transfer, after going through the same risk/benefit discussion.

Question: An ED is adjacent to the hospital entrance. Often, patients without an emergency condition enter through the ED door and state, "I want to see a doctor." Is it a violation of EMTALA to walk them over to the adjoining clinic (attached to the hospital) to have them seen by the on-call physician in the clinic? Or do they need to be admitted to the ED, screened by the nurse, and then be seen by the on-call physician, who would then need to be summoned over to the ED from the clinic?

Answer: In this scenario, sending the patients to the clinic would be an EMTALA violation, says Lawrence.

A patient coming to the hospital seeking medical attention is precisely the patient who is required to have a screening examination to determine whether an emergency medical condition exists, he stresses.

"The question implies that these patients do not have a pre-existing appointment," he says. "This is a different situation than the patient who mistakenly walks into the ED and states they have an on-campus appointment with Dr. Smith and can be directed to Dr. Smith's office."

The question implies that someone is making the decision that the patient does not have an emergency medical condition before walking the patient over to the drop-in clinic, notes Lawrence. "Who is making this decision, and what criteria are being used?" he asks.

There is no question that nurses qualify under EMTALA to do screening examinations provided the hospital has set up precise protocols to be followed, he says. "If the hospital has such protocols, non-urgent patients can be identified by the screening examination and sent to the walk-in clinic for treatment."

[Editor's note: This column is an ongoing series that will address reader questions about the EMTALA. If you have a question you'd like answered, contact Editor Staci Kusterbeck. Telephone: (631) 425-9760. Fax: (631) 271-1603. E-mail: StaciKusterbeck@aol.com.] ■

Sources

For more information about EMTALA, contact:

- **Stephen Frew**, JD, Frew Consulting Group, 6072 Brynwood Drive, Rockford, IL 61114. Telephone: (815) 654-2123. Fax: (815) 654-2162. E-mail: sfrew@medlaw.com.
- **Jonathan D. Lawrence**, MD, JD, Emergency Department, St. Mary Medical Center, 1050 Linden Ave., Long Beach, CA 90813. Telephone: (562) 491-9090.

New standards to assess staffing

Do you currently use staffing ratios to assess staffing needs? If so, new standards will call for you to switch to a different method.

New standards being pilot tested by the Oakbrook Terrace, IL-based Joint Commission on Accreditation of Healthcare Organizations require the use of performance indicators to assess the effectiveness of staffing. They are expected to become effective in 2002.

The standards require you to assign staffing based upon outcomes, says **Diana Contino**, RN, MBA, CEN, CCRN, president of Emergency Management Systems, a Monarch Beach, CA-based consulting firm which specializes in staffing issues. "The key to your success with these 'clinical/service and human resource screening indicators' is which ones you decide to use," she notes.

The clinical service indicators include adverse drug events, patient falls, patient and family complaints, pneumonia after major surgery, injuries to patients, skin breakdown, IV-related infections, and wound infection.

The human resource screening indicators are overtime, closed beds, floating of staff, sick time, on-call/per diem use, staff injuries, nursing care hours, understaffing as compared to an organization's staff plan,

staff turnover, staff satisfaction, and vacancy rate.

You'll need to choose at least two indicators in each category to monitor, says Contino. "Surveyors will be looking at the relevancy and sensitivity of the indicators," she says. "If the facility has chosen indicators that are not relevant and sensitive to their situation, the facility may be cited and asked to develop an action plan."

Contino notes that assessment of staffing using patient outcomes is the focus of a new study, which concludes that the number and mix of nurses in a hospital make a difference in the quality of care patients receive. **(See resource box to learn how to obtain a copy of the study, opposite.)**

The study is based on 1997 data from more than 5 million patient discharges. It found a strong relationship between nurse staffing and five outcomes: urinary tract infection, pneumonia, shock, upper gastrointestinal bleeding, and length of stay. A higher number of nurses was linked to a 3-12% decrease in adverse outcomes.

The researchers recommend that universal definitions of nursing categories be adopted, along with procedures to calculate full and part-time equivalent employees, report nurse staffing data by inpatient and outpatient categories, and report data by specific nursing unit and nursing practice pattern such as primary, team, and functional, notes Contino.

Contino urges nurses to use these strategies to monitor outcomes and act on any adverse findings. "This new standard should help nurses and human resources departments validate and correct ineffective staffing patterns, and practices," she predicts. ■

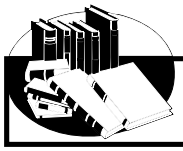
Sources/Resources

To learn about the new standards to assess, contact:

- **Diana Contino**, RN, MBA, CEN, CCRN, Emergency Management Systems, 24040 Camino Del Avion, Suite 123, Monarch Beach, CA 92629. Telephone: (949) 493-0039. Fax: (949) 493-7568. E-mail: diana@ConsultingEMS.com.

The complete draft standards and indicators are posted on the Joint Commission's web site, www.jcaho.org. Click on "Standards" and scroll down to "Draft Standards."

A study released in April 2001 on nurse staffing and patient outcomes can be downloaded for free on the Health Resources and Services Administration Bureau of Health Professionals web site (bhpr.hrsa.gov). Click consecutively on "Overview of Programs," "Nursing," and "Nurse Staffing and Patient Outcomes in Hospitals."



JOURNAL REVIEW

Kovacs G, Bullock G, Ackroyd-Stolarz S, et al. **A randomized controlled trial on the effect of educational interventions in promoting airway management skill maintenance**. *Ann Emerg Med* 2000; 36:301-309.

Independent practice with periodic feedback is effective in maintaining skill in advanced airway management, according to this study from Dalhousie University in Halifax, Nova Scotia, Canada. A group of 84 students with no prior airway management experience were trained to perform endotracheal intubation using an advanced airway mannequin. They were divided into three groups: periodic feedback only, independent practice plus periodic feedback, and a control group.

Because advanced airway management is performed infrequently, there are concerns about maintenance of skill competence, note the researchers. The study found that airway management skill performance declines quickly after initial training.

Over the 10-month study, each group was evaluated three times. Competency scores of the control group decreased by 25%, and the group with periodic feedback alone had only slightly better scores. In contrast, the students who received independent practice plus feedback showed no significant decrease in their skills over time and also had higher scores during the study.

The results show that the use of independent practice and periodic observation with feedback were the best way to retain advanced airway management skills. "The study provides a model on which one might design/modify a training program for users such as rural physicians or paramedics," write the researchers. ■

CE/CME objectives

After reading this issue of *ED Management*, the continuing education participant should be able to:

1. Identify two recommendations for preparation for a terrorist attack, according to a new ACEP/HHS report. (See "Are you prepared for terrorist attack? New report tells how to train ED staff" in this issue.)
2. List two things to include in a disaster drill decontamination scenario. (See "Are you prepared for terrorist attack? New report tells how to train ED staff.")
3. Name the most effective way to maintain airway management skills. (See "Journal Reviews.")
4. Identify what an ED must do when transferring a patient to another ED in the same hospital system. (See "EMTALA Q&A.")
5. Cite an example of appropriate risk/benefit documentation to comply with EMTALA requirements. (See "EMTALA Q&A.")
6. List three indicators that hospitals may use to assess staffing, according to new Joint Commission standards. (See "New standards to assess staffing.") ■

CE/CME questions

25. Which of the following is recommended regarding preparation for terrorist attacks, according to Robert Suter, DO, MHA, FACEP, senior medical director of the North Texas region for Questcare Emergency Services?

A. Instructions for responding to nuclear, biologic, and chemical incidents should be separate from your hospital disaster plan.

ED Management® (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. Periodical postage paid at Atlanta, GA. POSTMASTER: Send address changes to **ED Management**®, P.O. Box 740059, Atlanta, GA 30374-9815.

ED Management® 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. American Health Consultants® is accredited by the Accreditation Council for Continuing Medical Education to sponsor CME for physicians. American Health Consultants® designates this continuing medical education activity for 18 credit hours in Category 1 of the Physicians' Recognition Award of the American Medical Association. This activity was planned and produced in accordance with ACCME Essentials. **ED Management**® is also approved by the American College of Emergency Physicians for 18 hours of ACEP Category 1 credit. Physician members of American Health Consultants® 1999 Continuing Medical Education Council: Stephen A. Brunton, MD; Dan L. Longo, MD; Ken Noller, MD; Gregory Wise, MD and Fred Kauffman, MD, FACEP.

Subscriber Information

Customer Service: (800) 688-2421 or fax (800) 284-3291 (customerservice@ahcpub. com). **Hours of operation:** 8:30 a.m.-6 p.m. Monday-Thursday; 8:30 a.m.-4:30 p.m. Friday, EST. Subscription rates: U.S.A., one year (12 issues), $427. Outside U.S., add $30 per year, total prepaid in U.S. funds. Two to nine additional copies, $342 per year; 10 to 20 additional copies, $256 per year; for more than 20, call (800) 688-2421 for special handling. 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 $71 each. (GST registration number R128870672.)

Statement of financial disclosure: To reveal any potential bias in this publication, and in accordance with the Accreditation Council for Continuing Medical Education guidelines, we disclose that Dr. Auer (editorial advisory board member) is a stockholder in Lynx Medical Systems; Dr. Bukata (advisory board member) is president of the Center for Medical Education and is the developer of EDITS software; Dr. Mayer (advisory board member) is a stockholder in Emergency Physicians of Northern Virginia Ltd. and Patient Care and ED Survival Skills Ltd.; Dr. Yeh (advisory board member) serves as a consultant to Dynamics Resource Group, a spokesperson for Medic Alert, and a member of the board of directors for Vital Solutions and MassPRO.

AMERICAN HEALTH CONSULTANTS™
THOMSON HEALTHCARE

B. Nuclear, biologic, and chemical incidents should be an integrated part of your overall disaster plan.

C. Decontamination planning and site security should be priorities only for EDs in urban areas that are more likely to be targets of terrorist attacks.

D. Decontamination education should be provided to emergency medical services staff, but not nursing or medical staff.

26. Which is true regarding preparation for an incident which requires large-scale decontamination, according to Robert Takla, MD, FACEP, medical

director of emergency services at St. John NorthEast Community Hospital?

A. Most EDs are already prepared to decontaminate large numbers of patients.

B. Most EDs are not prepared to decontaminate large numbers of patients.

C. Drills involving decontamination scenarios are not recommended.

D. Use of personal protective equipment is not required except in large-scale decontamination.

27. Which of the following is the most effective way to maintain airway management skills of clinicians, according to a study in *Annals of Emergency Medicine*?

A. periodic feedback alone

B. independent practice alone

C. a one-time comprehensive training session

D. periodic feedback with independent practice

28. To comply with EMTALA regulations, what are hospitals required to do when a patient is transferred from a smaller ED to a larger ED in the same system (under one license and Medicare provider number), according to Stephen Frew, JD, president of the Rockford, IL-based Frew Consulting Group?

A. a medical screening examination only at the larger ED

B. medical screening and stabilization at the smaller hospital, consult with the larger ED, and appropriate medical transport of patients between the two sites

C. EMTALA obligations end after 911 is called.

D. EMTALA requirements do not apply, because the patient is being transferred within the same hospital system.

29. Which of the following is true regarding proper documentation for risk and benefits of patients being transferred, according to Jonathan D. Lawrence, MD, JD, an ED physician and medical staff risk management liaison at St. Mary Medical Center?

A. Documentation of risks and benefits is required even for patients who are transferred in stable condition.

B. Documentation of risks and benefits is only required for patients transferred in nonstabilized condition.

C. Specific terminology must be used.

D. The patient or representative does not have to agree with the transfer as long as risks and benefits are explained and documented.

30. Which of the following is true regarding new staffing assessment standards from the Joint Commission?

A. They require the use of staffing ratios.

B. They require the use of performance indicators.

C. Each facility must use indicators assigned to them by surveyors.

D. Only clinical service indicators may be used. ■

St. John NorthEast Community Hospital
Detroit

SUBJECT: Code Yellow Institutional Disaster Plan **DEPARTMENT: Administration**
DATE: April 2000 **DISTRIBUTION: All Departments**

PURPOSE:
The purpose of this Disaster Plan is to have a program of sound, orderly action for the hospital and Medical Staff in the event of any emergency classified as a disaster.

POLICY:
"Code Yellow" is a term used in the hospital to denote a disaster situation or disaster drill. To underscore the importance of drills in the preparedness process, they are announced the same way as an actual disaster. A code yellow brings a medical and administrative response team together to treat numbers of casualties — a larger number than could routinely be treated in the Emergency Department or a haz mat situation. This policy sets the framework for the hospital's disaster preparedness and response efforts. Departments with specific responsibilities during a code yellow are expected to develop and implement procedures that coordinate with this institutional plan.

PROCEDURE:

A. CODE YELLOW DEFINITION

CODE YELLOW is the term used in the hospital to alert employees and the medical staff that a situation has occurred, which will bring more casualties to the hospital than can be handled through routine Emergency Department operations. Employees and the medical staff are alerted to an actual or impending disaster situation (or drill) over the public address, using the **CODE YELLOW** designation, in order not to alarm patients and visitors.

Internal Disaster Situation — **"CODE YELLOW"** followed by **location** will be announced.
Haz Mat Situation — **"CODE YELLOW HAZ MAT"** will be announced.

B. NOTIFICATION OF DISASTER SITUATION

The types of situations that lead to the calling of a **CODE YELLOW** are generally situations that leave a large number of injured in need of medical care. The Emergency Medical Service (EMS) or police department, who generally transport the injured, are expected to notify the receiving hospital that they are bringing a number of patients and give general indications of injuries. This is usually done over the telephone or the EMS radio system.

C. PREPARATION PRIOR TO CALLING A CODE YELLOW

The person receiving notification of the disaster will immediately notify the Emergency Department Patient Care Coordinator/Charge Nurse.

The PCC/Charge Nurse and ED Physician in conjunction with the Administrative Director of ED Services and Safety Officer will evaluate the situation and determine the need for initiating the disaster plan.

D. CALLING A "CODE YELLOW"

A **CODE YELLOW** should be initiated by the ED Administrative Director/PCC/designee without delay. The switchboard operator will be notified to call a **CODE YELLOW** by dialing 45. The code is officially started by announcing "CODE YELLOW" three times over the public address system. For an internal disaster situation, a

"CODE YELLOW" followed by location will be announced. For a haz mat situation, a **"CODE YELLOW HAZ MAT"** will be announced.

E. LOCATIONS AND THEIR SPECIAL DESIGNATIONS DURING A DISASTER

A number of locations have special designations during a disaster situation: See Attachment C.

1. The Control Center is the headquarters for disaster (disaster drill) activity. It is located in the Community Relations conference room at St. John NorthEast Community Hospital (ext. 2365). Risk Manager or designee will be in charge of the Control Center.
2. The Triage or patient sorting area is located in the Emergency Department area, nearest the ambulance entrance. In the event of an internal disaster, the triage site would be a safe distance from the internal disaster location. The Director of Safety/Security or designee will work with ED staff to establish a triage area. In the event of a haz mat situation, triage will be in an area designated by security.
3. Patient Registration will be located adjacent to triage area.
4. Major Treatment is located in the Critical Care area of the Emergency Department. If a patient has been identified by the triage doctor or nurse to need immediate and complex care, the patient would be taken to major treatment.
5. Minor Treatment is located within the Emergency Department outside of the Critical Care areas. After triage evaluations, minor treatment is for patients whose injuries can wait until medical manpower becomes more available.
6. The Morgue remains in its usual location. Victims who arrive DOA will be taken to the morgue, pending instructions from civil authorities.
7. The Manpower Pool is located in Classrooms A and B. The Manpower Pool is administered by the Director of Human Resources or designee and is staffed by employees freed up by their manager/supervisor from their routine duties. Duty assignments and identification arm bands as follows:

RN	Red
Helpers	Peach
Respiratory Therapist	Blue
Clerk/Unit Secretary	Purple
EDT/Nurse Assistant	Brown
Others	White

8. The Medical Manpower Pool is located in the Medical Staff office/Doctor's Lounge. The pool is coordinated by the Manager of Physician Services or designee. During a disaster situation, doctors are expected to remain in the hospital or come to the hospital, to treat the casualties. Doctors will be issued a yellow arm band.
9. The Public Information Office will be operated in the main lobby at the Information Desk. The area is staffed by Community Relations. The Director of Community Relations shall direct the office and serve as hospital spokesperson.
10. The Discharge Area is located in the Emergency minor treatment area/GYN room. Patients are treated in a disaster situation without first processing paperwork. All patients treated and ready for release must be taken to the discharge area for processing.
11. The Family Waiting Area will be located in the Surgical Lounge staffed by Social Work and Discharge Planning. This area will be activated as family members arrive and need to be informed regarding the status of their relatives and loved ones.
12. The ED Lobby is staffed by Security, Social Work, and Discharge Planning staff. They will help direct visitors and media.

F. INTERNAL DISASTER SITUATIONS

An internal disaster situation is caused by significant or threatened staff and/or patient casualties with attendant damage or destruction to the physical plant.

1. The charge person or designee at the disaster site shall notify the Emergency Department Administrative Director/Patient Care Coordinator or designee of the disaster situation and establish the triage area. He or she also will notify the operator.

2. An internal disaster plan shall be implemented in the same manner as the external disaster plan; however, in the internal disaster plan, the switchboard operator or designee shall also announce the location of triage, which shall be at or near the disaster site.
3. The Security Services Department will notify appropriate civil authorities (i.e., EMS, Detroit Fire Department, Detroit Police Department), if indicated by the nature of the internal disaster.
4. Plans for partial or full evacuation of the hospital shall be activated by the Detroit Fire Department Incident Commander or designee. The charge person at the scene, however, may evacuate persons from the areas of danger to a safe location inside or outside of the hospital if civil authorities have not yet arrived. (Please refer to Evacuation Policy.)

G. ALTERNATE METHODS OF COMMUNICATIONS

Part of any disaster situation, whether internal or external, can be partial or complete outage of the central telephone system. The hospital has determined that in such an event, alternative types of communication should be used:

1. For Internal Communications:

a. Plant Operations has a number of walkie-talkies that can be distributed and used by the key staff. Radios will be distributed at Major/Minor Treatment, Control Center, Manpower Pool, and Triage areas.

b. Messengers (from the Manpower Pool) can deliver written and verbal messages.

2. External Communications:

a. Security Services has an emergency cellular phone at the ED security office. Check with the switchboard/Telecommunications Manager for additional cellular telephones.

H. OBTAINING SUPPLIES DURING A DISASTER

From Internal sources: Normal supplies on hand may not be sufficient during a disaster. Areas needing supplemental supplies should contact Materials Management or Pharmacy. Between 3 p.m. and 7 a.m., security staff will obtain additional supplies as requested/required from Materials Management. Pharmacist on call should be contacted for the needed pharmacy supplies. Emergency orders will be filled as messengers wait. If your department anticipates a need for unusual amounts of specific supplies, this information should be shared with the Director of Materials Management or designee.

From External sources: Contact the staff of Materials Management if you need or will need supplies and equipment not kept at the hospital. Discuss your anticipated needs and available stock in Stores and other departments with Materials Management.

I. RE-SCHEDULING & MODIFICATIONS

1. During an actual disaster situation, Control Center staff will work with impacted departments regarding their need to change patient care schedules or to temporarily shut down operations. Managers and Directors or designee(s) will work to facilitate transfer or discharge of appropriate patients.
2. The Nursing Department Administrative Directors or designee(s) will work to facilitate transfer or discharge of appropriate patients. A list of these patients will be sent to Patient Registration (See Attachment A and B).
3. During drill situations, patients should not be re-scheduled. Patients, however, may face some temporary delays in service. The Department Director needs to be contacted if more than temporary delays will be encountered.

J. See Radiation and Chemical Isolation and Decontamination Plan.

K. CALL LIST NOTIFICATION

In the event a disaster is called (7 days, 24 hours), the switchboard operator and other designated employees will initiate call-in notification of key employees based on the Emergency Call List.

President and All VPs
Director of Patient Financial Services
Director of Spiritual Care

Director of Human Resources
Administrative Director of Anesthesia
Administrative Director of Surgical Services/Recovery Room
Director of Pharmacy
Director of Safety
Director of Telecommunications
Director of Marketing/Community Relations
Administrative Director of Emergency Services
Director of Social Work and Discharge Planning
House Supervisors
Nursing Director on call
Risk Manager
Manager of Physician Services

L. ALL CLEAR PROCEDURE

Each of the following treatment areas shall radio the Control Center immediately upon completion of expected disaster related activities:

Triage
Treatment area (Major and Minor)

The Control Center will notify the switchboard operator to announce CODE YELLOW-ALL CLEAR, ending formal disaster or disaster drill activity.

M. CRITIQUE AND REVIEW

After each disaster or disaster drill, a critique will be held. ■

St. John NorthEast Community Hospital
Disaster Plan
CCU or Intermediate Care Transfer to Regular Bed List

<u>UNIT SECRETARY OR MESSENGER</u> will deliver or fax (Ext. 5650) this list to the Central Registration Office once determinations are made.

FROM BED	TO BED	FROM BED	TO BED

CODE YELLOW – DISASTER PLAN
ATTACHMENT B

St. John NorthEast Community Hospital
Disaster Plan
Inpatient Disaster Discharge Bed List

UNIT SECRETARY OR MESSENGER will deliver or fax (Ext. 5650) this list to the Central Registration Office immediately after patients have been seen and a determination made.
NOTE: If ambulance is needed for discharge, indicate on this sheet.

Room Number	Male or Female Bed	Patient's Name	Ambulance Indicated

CODE YELLOW – DISASTER PLAN
ATTACHMENT C

St. John NorthEast Community Hospital
Code Yellow
Master Staffing Plan of Disaster Sites

Department	Major Treatment	Minor Treatment	Triage	Manpower Tool	Front Lobby/ ED Lobby	Family Receiving Surgical Lounge	Information Desk	Control Center	Medical Manpower	Discharge Area
Patient Registration			1 Staff							3 Staff
Patient Care Services	1-ED RN 1-CCU RN 1-Step Down RN 1-EDT	1-ED RN 1-Step Down RN	1-ED RN 1-M/S RN				1-M/S RN			1-ED RN 1-Rehab RN
Cardio-Pulmonary	1-RT	1-RT								
Pathology	1-Lab Assistant (To assist wherever needed)									
Support Services			1-Security Officer	2 + House-keeping staff 2-Maintennce staff	1-Security Officer per area			Safety Director		
Human Resources Services				2+H.R. Managers & staff						
Community Relations			X				X			
Social Work & Discharge Planning				1-2 Social Work Staff	1-2 Social Work Staff	1-Social Work Staff				
Medical Records				1-Medical Records Staff						
Medical Staff									All Medical Staff at the hospital/ Manager, Physician Services	
Radiology	1-Tech	1-Tech								
Spiritual Care	Priest/Chaplain on call					Chaplain/ Sister				
Pharm. Services	1-Tech (To assist wherever needed)									