AMERICAN HEALTH CONSULTANTS®

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The monthly update on Emergency Department Management

Vol. 14, No. 4

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- *Bioterrorism Watch*
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APRIL 2002

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New JCAHO staffing standards: You may be surprised at what you need to do

You'll need new methods to assess whether your staffing is adequate

Do you have sufficient qualified staff to care for the patients who come to your ED? Do you use specific indicators to be sure your staffing is adequate?

These are two things you must do to comply with new requirements from the Oakbrook Terrace, IL-based Joint Commission on Accreditation of Healthcare Organizations (JCAHO). The standards, which are effective as of July 1, 2002, require you to assess staffing based on clinical/service and human resource outcomes.

The good news is that using the Joint Commission's indicators will help you set effective benchmarks for your ED, according to **Camilla L. Jones**, RN, BBA, director of emergency and transfer services at Lewis-Gale Medical Center in Salem, VA. "However, the process will take some time and careful analysis of trended data," she says.

The Joint Commission's method uses a multidimensional approach, instead of focusing on a single indicator, Jones says. "This is good, because parameters with a narrow focus usually spell disaster for ED operational management," she says. "There are so many variables and few opportunities to control patient flow."

If you're like most ED managers, you probably plan staffing according to trends in patient volume, notes Jones. "The most effective trending tools are electronic systems that allow the manager to monitor patient volume in small time frames, such as hourly," she says.

Executive Summary

As of July 1, the Joint Commission on Accreditation of Healthcare Organizations will require you to assess staffing by using specific indicators based on clinical/service and human resource outcomes.
- Your ED must have sufficient numbers of qualified staff to care for patients, including direct and indirect caregivers.
- Nurses must have the required skills to care the for patients they are assigned to.
- If data reveal inadequate staffing, you must take appropriate action to correct this.

However, Jones warns that the new Joint Commission indicators require you to monitor more than just volume. "They insist acuity and volume surges be taken into consideration, so dust off your crystal ball!" she says.

She adds that the new standards may make it possible for you to increase manhour per stat ratios to a more acceptable level. "This will better provide quality care and facilitate good outcomes for all patients, including those with higher acuities and longer ED lengths of stay," she says. "This in itself will promote improved patient outcomes and satisfaction, as well as staff satisfaction and retention."

Here are ways to comply with the standards:

• Ensure there is an adequate number of qualified staff to care for patients.

Staff must have the requisite education and training, current licensure, certification or registration, and they must possess the knowledge and experience necessary to carry out their assigned responsibilities, advises **Kathleen Catalano**, RN, JD, director of administrative projects at Children's Medical Center of Dallas.

"The surveyors also will ask staff if they have age-specific competencies and what they are," she adds.

The standards address all patient care professionals, not just nurses, notes **Patrice L. Spath**, RHIT, a health care quality specialist with Brown-Spath & Associates, a Forest Grove, OR-based firm that provides performance improvement training for health care organizations.

"The standards encourage an adequate skill mix of professionals to meet the needs of the population served by your ED," she says.

For example, if your ED has a high number of patients with mental or behavioral health problems, you are expected to have staff that can care for these patients, says Spath. "This may be psychiatric nurses, social workers, psychologists, or other people with appropriate training," she adds.

Joint Commission surveyors want to see that you've gathered information to determine the clinical needs of your patients, adds Spath.

Catalano notes that direct and indirect caregivers should be included when using the human resources screening indicators.

You must be certain that a nurse assigned to a patient has the skills to care for that patient, says Catalano. She recommends answering the following questions to assess this:

• Are the staff members licensed in Trauma Nursing Core Curriculum or the equivalent?

• Do you provide nurses with inservices to help them learn about trauma?

• Is pediatric advanced life support (PALS) training or the equivalent a requirement for nurses?

• What is the time frame within which they must achieve that training?

• Are other PALS-trained nurses available until that training has been accomplished?

Jones says she uses approximately 70% licensed personnel in the care of ED patients. "We only include RNs in our licensed mix. All other personnel are included in technical or support service mixes," she says. "However, I feel this can be a nebulous indicator for the purposes of JCAHO surveys," she says.

She argues that there is no consistency from facility to facility for training requirements, which employees are counted or not counted, and how they are placed into service, such as which skill mix is utilized during a shift or time frame. For instance, Jones says her ED counts environmental services personnel, but not registration personnel, she says. "Our tech staff is all EMT and largely EMT-paramedic, providing a highly skilled technical component," she says.

Nurse externs also are counted, Jones says. "These personnel are in the last six months of their senior year of nursing school and have worked previously in the ED, mostly in EMT tech roles," she adds. "They usually have an ED nursing job here when they graduate, so my recruitment and retention numbers are very low."

Jones adds that nurses from the forensic program and the interfacility transfer program also are included in the staffing break-out. "So if our percentiles are stacked up against other facilities, or a national average, I feel the assessment of skill mix must be evaluated consistently to provide valid benchmarking," she says.

• Monitor indicators of staffing deficiencies.

Closely monitor process or outcome measures that may be indicators of staffing deficiencies, Spath advises. "For example, if a significant number of ED patients must wait a long time before being evaluated

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by a caregiver, that can be a symptom of staffing problems," she says.

For the Joint Commission's "clinical/service" indicators, Jones tracks patient/family complaints, staff satisfaction, sentinel events, and length of stay. To collect this data, the ED uses Meditech software (Medical Information Technology, Westwood, MA) and Logicare software (Logicare Corp., Eau Claire, WI), along with manual chart retrieval and analysis.

To gauge patient and employee satisfaction, the ED uses hospital-based surveys, and the facility uses independently-conducted surveys from The Gallup Organization, based in Princeton, NJ. "These are broken down by department and compared," she says.

Spath recommends reviewing the staffing indicators suggested by the Joint Commission and determining which ones will be relevant to your ED. Ideally you should select at least two clinical/service indicators and two human resource indicators, says Spath. **(See list of Joint Commission staffing indicators, left.)**

Evaluate these indicators at least quarterly to determine if staffing deficiencies are the root cause of any problem areas that may be identified, says Spath.

"No single measure can reliably evaluate staff effectiveness," she acknowledges. "However, the measurement results may raise questions about staffing that need to be looked into in greater detail."

• Evaluate the system you use to make staffing decisions.

Your decisions must be based on acuity of patients served and competence, education, and experience of staff, says Spath. "If not [being done], re-evaluate your method for staffing decisions so that all of these elements are considered," she advises.

The Joint Commission expects you to identify, quantify, and fix staffing problems yourself, by using outcome-based data analysis, says Jones. She recommends using staffing formulas based on previously accepted data to support changes in acuity and lengths of stay in ED settings.

Jones created an adjusted outpatient census formula to adjust staffing to include patients that are held in the ED for more than six hours. "In addition, I have just created another acuity based formula to justify productivity for increased admission rates," she says. "Ours is currently 23%."

The new Joint Commission standards are a

Here are the questions surveyors will ask

To assess compliance with new staffing standards, surveyors from the Oakbrook Terrace, IL-based Joint Commission on Accreditation of Healthcare Organizations will be asking the following questions, says **Kathleen Catalano**, RN, JD, director of administrative projects at Children's Medical Center of Dallas:

- What method do you use to determine the appropriate staffing in this department?
- What measures do you use to determine if staffing is effective?
- Are there a sufficient number of staff in the ED?
- What are the peak periods?
- How do you ensure staffing is adequate for peak periods?
- What steps do you take if your ED is completely full?
- How do you assure yourself and the hospital that the staff have the requisite knowledge and skills to care for the patients treated?

To assess whether staffing is adequate, Catalano recommends choosing from the following screening indicators. "These are probably most pertinent to the ED," she says.

For clinical/service indicators:
- family complaints;
- adverse drug events;
- injuries to patients;
- shock/cardiac arrest.

For human resources indicators:
- overtime;
- staff vacancy rates;
- staff satisfaction;
- staff turnover rate. ■

Sources

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performance improvement process, says Catalano. "You need evidence that appropriate action is actually taken when data have been analyzed," she adds.

For example, if your data reveal ineffective care of patients during specific time frames, you can change staff hours to correct this, says Catalano. "Someone may need to come in earlier to cover a three-hour block of time," she suggests.

Next, use your performance improvement process to determine if that action is effective, Catalano. "If not, it's back to the drawing board," she says. ■

Here's how to make point-of-care testing a success

A patient is discharged with chest pain, a normal electrocardiogram, and a normal first set of enzymes. Later, you find out that that the lab made an error reporting the results. Has this occurred in your ED?

"Many EDs experiences this scenario, and it's a physician's nightmare," says **Michelle Myers Glower**, RN, MS, former director of emergency and trauma services for Elmhurst (IL) Hospital and a Glencoe, IL-based consultant specializing in staffing issues.

She acknowledges that an ED should never send a patient out without seeing the labs, especially enzymes. "However patients may be discharged with lab errors due to many variables, especially when to many people are handling the specimen," says Glower.

She notes that with point-of-care testing, a single nurse or technician is handling the specimen, running the test, and getting the results.

"Most errors happen when too many cooks spoil the brew," Glower says. "I have also seen ED patients not waiting for results and negotiating with the physician to leave because the patient has no history, is young, and has a normal EKG."

This is setting yourself up for a lawsuit, she says. "Calling the patient back in for admission is risky business, if he or she hasn't already arrested," Glower says.

Executive Summary

Point-of-care testing can ensure that patients are discharged from the ED appropriately.

- Tests done in the ED can save up to 50 minutes in lab turnaround time.
- If a single individual handles the testing and results, there is less chance of error.
- Joint Commission surveyors will be looking for the ability to maintain quality control and proficiency testing records.

Don't put patients in wrong bed

Point-of-care testing can help you discharge patients appropriately, according to Glower. She points to an internal study that showed that ED physicians were able to make a quicker and more accurate disposition by having lab results within 15 minutes.

"It gave the physician the information needed to admit the patient in the ICU," Glower says. "This is especially important when the patient's history is unremarkable and you may have discharged the patient instead of admitting."

As a result, ED staff are able to accurately place patients in the right bed, says Glower. A chest pain patient who is stable does not necessarily get admitted to the ICU; instead, he or she can go to a telemetry stepdown unit, she says.

"If the first set of enzymes are normal and you are admitting all these patients to the ICU, it is a waste of resources and lost revenue," says Glower. "The last thing you want to hear from is the utilization review department asking why a patient is in the ICU with normal enzymes."

EDs are increasingly using point-of-care testing for blood glucose, rapid strep, urine dipsticks for blood or leukocytes, urine pregnancy, hemocue, electrolytes, arterial blood gases, and cardiac markers, says Glower. There are many new products on the market for point of-care-testing, she reports.

"Many vendors are coming out with instrumentation the size of a fax machine for the most frequently ordered tests in EDs," says Glower. **(See resource box for list of manufacturers, p. 41.)**

Quicker results mean a patient's workup in the ED, such as X-rays, labs, computed tomography scans, and ultrasounds, can be started sooner, says **Bonnie Hansen**, RN, an ED nurse at Highland Park (IL) Hospital. **(See related story for pros and cons of point-of-care testing, p. 41.)**

The hospital's lab turnaround time is about an hour, notes Hansen. "For a urine pregnancy test that takes us four minutes, or a rapid strep that takes 10 minutes, that means a time saving of 40 to 50 minutes," she says.

Glower says there can be a significant decrease in the wait time for disposition. "This adds to patient satisfaction because they are getting information sooner," she explains. "It may also prevent them from leaving

against medical advice, which can possibly prevent a bad outcome."

Here are ways to effectively implement point-of-care testing in your ED:

• Be ready for Joint Commission surveys.

At high volume EDs, surveyors from the Oakbrook Terrace-based Joint Commission on Accreditation of Healthcare Organizations will be on the lookout for incomplete quality control and test reporting based on time and staffing constraints, says Glower.

"At low-volume EDs, they will look for inability to maintain quality and proficiency testing records due to lack of familiarity with the protocols," she adds. **(See related story on use of a point-of-care coordinator, p. 42.)**

• Select the right equipment.

Glower recommends using the following attributes as a guide when purchasing a point-of-care instrument:

— a system with multiple test panel disposables;
— a system with an internal quality control;
— a system that is user-friendly;
— a system that is compliant with the Clinical Laboratories Improvement Act (CLIA);
— a system that gives quantitative results;
— a system that is cost-effective.

• Involve the right people.

Before asking for capital dollars to purchase a point-of-care instrument, Glower recommends getting buy-in from following individuals: the ED medical director, ED manager, vice president of patient care services, laboratory director, laboratory point-of-care coordinator, and vice president of finance.

"Administrators don't want to hear the arguments between you and the lab. They want a proposal showing how they will benefit," she says. "All of them need to be on board to hash out the differences from revenue to quality control, *before* implementation." ■

Resources

Here is a partial listing of products used for point-of-care testing in the ED:

- **Alpha Dx Point** of Need System delivers whole blood cardiac marker profiles in less than 18 minutes for myoglobin, creatine kinase (CK), isoenzyme of creatine kinase with muscle and brain subunits (CK-MB), and cardiac troponin I. Serial patient tests, referenced to symptom onset, are displayed in a graphical format. The system requires no calibration, and bi-level quality controls are automatically run with every sample. For more information, contact Winnie Subramaniam, First Medical, 530 Logue Ave., Mountain View, CA 94043. Telephone: (800) 634-5654 ext. 7821 or (650) 903-5974 ext. 7821. Fax: (650) 903-9040. E-mail: wsubramaniam@firstmedical.com. Web: www.firstmedical.com.
- **Signify Strep A** is a test waived by the Clinical Laboratories Improvement Act (CLIA) for the detection of Group A Streptococcal antigen from throat swabs or confirmation of presumptive Group A Streptococcal colonies recovered from culture. The cost for a packet of 30 tests is $113.44. For more information, contact: Abbott Laboratories, Diagnostics Division, 100 Abbott Park Road, Abbott Park, IL 60064-3500. Telephone: (800) 323-9100 or (847) 937-6100. Fax: (847) 937-3130. Web: www.abbott.com.
- **Sure-Vue hCG Stat Test Kits** are visual, one-step tests for the qualitative determination of human chorionic gonadotropin (hCG) in serum or urine to aid in early detection of pregnancy, with results within 4-5 minutes. The cost for a 50-test kit is $170. For more information, contact: Fisher HealthCare Customer Service, P.O. Box 1546, 9999 Veterans Memorial Drive, Houston, TX 77038. Telephone: (800) 640-0640 or (281) 820-9898. Fax: (800) 290-0290 or (281) 405-4075. Web: www.fishersci.com.

Consider pros and cons of point-of-care testing

Although there is a trend toward point-of-care testing in the ED, the practice is not without problems, according to **Thomas J. Allred**, MD, FCAP, FACEP, associate professor of emergency medicine and pathology and director of clinical chemistry, clinical toxicology and point-of-care testing at Medical College of Georgia in Augusta.

"Is the benefit of doing point-of-care testing in the ED worth the added expense and the added regulatory hassle — both of which can be considerable?" he asks.

The answer depends on your ED, says Allred. "Like most things in life, it is a trade-off," he says. "A cost-benefit analysis is the only way to arrive at the correct conclusion."

Here are some potential problems with point-of-care testing, and items to consider for each:

1. It costs more.

Point-of-care testing is considerably more costly than doing the same test in the laboratory, according to Allred. "It will always be more expensive on a direct cost basis," he says. "And we are talking dollars here as opposed to pennies or dimes."

Cost savings are only evident if you consider indirect ED costs, such as shorter ED stays resulting in

Use coordinator to ensure quality of tests

When using point-of-care testing in the ED, maintaining quality can be problematic, according to Michelle Myers Glower, RN, MS, former director of emergency and trauma services for Elmhurst (IL) Hospital and a Glencoe, IL-based consultant specializing in staffing issues.

She argues that there should be one individual responsible for implementing and coordinating all the laboratory tests performed at your facility.

"It is a wise choice to have this in place when considering point-of-care testing in your ED," she says.

There should be a documented system in place to detect clinical errors, significant analytical errors, and unusual test results, says Glower. "If not, you may be cited," she warns.

She gives the following responsibilities of a point-of-care coordinator:

- governing and administrating staff competencies;
- implementing a quality assessment program that includes quality control and proficiency testing;
- developing and distributing procedure manuals;
- coordinating test method selections;
- reviewing patient and quality control results for technical and clerical problems;
- initiating and facilitating proposals for new point-of-care testing instruments;
- chairing the point-of-care testing committee;
- ensuring standardization in recording and reporting of results.

The point-of-care coordinator must have a working knowledge of standards and regulations of various accrediting agencies, such as the Clinical Laboratories Improvement Act, says Glower. "ED staff typically do not want the muss and fuss of calibrating and all the paperwork that is required," she says. "They could care less how those results are processed and delivered. They just want it now."

ED staff have enough things to check daily, such as the temperature in all the refrigerators, argues Glower. "When point-of-care testing is in the ED, they will love it," she says. "But the quality assurance and the calibrating get missed without a designated person from the lab who loves that kind of detail." ■

fewer ED beds and hours of nursing care needed, he explains.

You also must consider the cost of quality control, proficiency testing, and regulatory requirements, Allred adds.

He acknowledges that it is difficult to assign a dollar value to shorter ED stays, improved patient flow, and increased patient satisfaction. However, if point-of-care testing improves patient flow, it can benefit patient care and your bottom line, he concludes.

2. Regulatory requirements must be met.

Allred points to strict requirements for laboratory testing of the Clinical Laboratories Improvement Act that you will need to comply with.

"These regulations are enforced by state inspectors, Joint Commission inspectors, and College of American Pathologists inspectors," he says.

If you fail one of these inspections, it is equivalent to failing a federal inspection, Allred warns. "That puts all reimbursement from Medicare and Medicaid at risk of being stopped — for the entire hospital, not just the lab or the ED," he says.

Regardless of where it's done, a test must meet certain requirements and be done in a certain way, Allred explains.

"Some point-of-care testing is classified as 'waived' with minimal requirements. But most are classified as 'moderately complex,'" he notes. "So there are significant requirements regarding quality control, record keeping, proficiency testing, reporting, and a host of other things," he says.

3. There may be disputes over revenue.

You'll need to determine which department will receive payment for the test, says **Bonnie Hansen**, RN, an ED nurse at Highland Park (IL) Hospital.

"If nursing has performed the test, shouldn't they collect the revenue for their time?" she asks. "We have to maintain adequate supplies and yearly competency testing."

The lab traditionally gets the revenue, but that can be negotiated, advises **Michelle Myers Glower**, RN, MS, former director of emergency and trauma services for Elmhurst (IL) Hospital and a Glencoe, IL-based

Sources

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consultant specializing in staffing issues. "If your ED draws the blood and sends it to the lab, you may collect that lab draw money under APCs," she notes. "Otherwise the lab is charging the patient for a lab draw that you did, regardless of where the testing occurred."

Still, there may be controversy, warns Glower. "An internal war may arise when it comes to dollars," she says. "A cut in revenue will mean a cut in FTEs [full-time employees]," she says.

At Elmhurst Hospital's ED, the revenues are split. "We charged for all of our draws, and the lab could charge if they drew the labs," she says. "All actual testing was done in the lab, so the lab still gets to bill."

4. Length of stay isn't always decreased.

When EDs switch to point-of-care testing, they are usually looking for one thing: to decrease turnaround times, according to Glower.

"The No. 1 complaint in EDs is wait times," she says. "Many ED administrators turn to point-of-care testing to reduce delays."

However, the jury is out as to whether point-of-care testing can achieve this, according to Allred. He points to three contradictory studies: One showed a decrease in patient stays in the ED of 10 minutes with point-of-care testing, while another showed a decrease of 55 minutes on patients discharged from the ED, but not on patients who were admitted, and a third study showed no difference in overall length of stay.[1-3]

Consider cost issues within specific clinical contexts, Allred advises. Look at the top 10 or 20 discharge diagnoses in your ED, and determine what laboratory testing was required for diagnosis and treatment, he suggests.

"With that information in hand, you can then look at how quicker testing might influence the care given," says Allred. "If significantly better care can be given with point-of-care testing, as with hypoglycemic coma or with starting thrombolysis for a myocardial infarction, then its use is clearly justified, regardless of the cost."

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Ask staff to help choose the right nurse manager

Choosing the right nurse manager for your ED is a major decision — so why not invite staff to help you make it? It's essential to involve staff in selecting their manager, argues **Colleen Bock-Laudenslager**, MS, RN, a Redlands, CA-based consultant who specializes in staffing.

"Staff nurses want to feel their opinions count," she says. "When you offer them the opportunity to participate, you are demonstrating their added value."

If they have given input, staff will tend to be more satisfied with their manager's performance in the future, adds **Debra Stelmach**, MSN, RN, who participated in the panel-based interviewing process at the Jerry L. Pettis VA Memorial Medical Center in Loma Linda, CA, where she is director of long term and extended care. **(See list of steps involved in the selection process, p. 44.)**

"Staff have a vested interest in making things work when they have actively participated in choosing someone they can work with," she says.

The system also develops leadership and decision-making skills for ED staff, she adds.

Bock-Laudenslager, who is a practicing ED nurse and former ED executive director at Loma Linda (CA) University Medical Center, used the panel-based interviewing process to professionalize nursing.

"I noticed that when physicians were recruiting, they had very sophisticated search committees and search letters," she says. "I thought 'Why can't nurses have the same process?'"

When a nurse manager position opened up, a recruitment letter was sent to all hospitals in the state, and staff were invited to participate in the hiring decision, Bock-Laudenslager says.

"The ED had faced many different challenges, and the staff felt beaten down," she says. "I felt the staff would

Executive Summary

If staff are involved in selecting a new ED nurse manager, it improves satisfaction and morale.

- Applicants can be interviewed by a panel of staff members.
- Invite staff to give input on the questions you ask candidates.
- Allow staff to choose the top candidates, but have administration make the final selection.

be less critical of our decision if they were part of it."

Here are things to consider when implementing panel-based interviewing:

• Invite staff to "elect" who will represent them on the panel.

A ballot is used to identify the employees the staff wants to represent them on the panel, Bock-Laudenslager says. "It is also used to identify the most important qualities they are looking for in a manager," she adds. **(See Emergency Department Nurse Manager Search Committee Ballot enclosed in this issue.)**

• Solicit ideas from staff.

Being part of the selection process can generate unique ideas from the staff, says Bock-Laudenslager. "The staff came up with the idea of taping the interviews, using name placards during the interview, and 'high tea' drinks and cookies for the interviewees," she says. "It was great to see their creativity."

• Use a scoring system.

A score sheet allowed the panel to rate applicants in areas including education, clinical practice experience, and management experience.

"Staff used critical thinking skills to compare and contrast the individual strengths and weaknesses of thecandidates," Bock-Laudenslager says.

• Have a second panel make the final selection.

Bock-Laudenslager advises having an all-staff panel choose the final two or three candidates. The final approval can rest with a smaller panel of administrators.

She cautions that staff may lose their objectivity. "In the past, I made the mistake of having a panel made up entirely of staff nurses select a nurse manager," says Bock-Laudenslager. "Since they wanted an internal candidate to get the position, they could not be objective in the review process."

The staff gave their colleague almost perfect scores, while other experienced candidates were receiving very low scores, she explains. "Even though I worked hard to educate them and open up their minds, they would not be budged," she says. "I was thankful that I had given them the task of coming up with the top two candidates."

Later, the "senior panel" which included physician service chiefs, a nursing executive, and a nurse manager interviewed the top candidates using a whole new set of questions. The second panel chose the more experienced candidate.

"It was a save, by leaving the final decision to the second panel," Bock-Laudenslager says. "The staff distanced

10 steps to follow for panel interviewing

Here are the steps taken for the panel interview process used to select an ED nurse manager at Jerry L. Pettis VA Memorial Medical Center in Loma Linda, CA:

1. A preliminary meeting was held with the ED physician chief and ED administrator to obtain endorsement of the panel process.
2. An "ED nurse manager search committee" questionnaire was created for the staff, to determine the preferred qualities, qualifications, experience level, educational background and credentials the staff deemed essential. A ballot was used to choose team members for the interview panel.
3. The questionnaire results were used to finalize the position posting for internal and/or external candidates, clarify the job description, and select the panel team members.
4. The ED administrator worked with the nurse recruiter to establish the area of search and obtain final administrative approval.
5. The position posting was publicized via bulletin boards, the Internet, nursing journals, and the ED.
6. The panel met to determine interview questions and the scoring guideline format, decide the logistics for the interview process, review the list of applicants, and ensure that all candidates met the criteria for selection.
7. The interview process was established, including scheduling, name cards for panel members, nourishments, tour, and pick-up arrangements for external candidates.
8. Interviews were conducted, with each panel member taking notes and scoring candidates.
9. Prospective employees were compared using the panel scoresheet.
10. The panel selected the final two candidates, discussed overall impressions and red flags, and reconvened for final discussion and selection. ■

Sources

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themselves from me for a long time, but later they saw that the nurse from the outside as clearly the right one for them."

• Include diverse representation.

If you want to have a single panel make the final decision, you'll need to have diverse representation, Bock-Laudenslager says. "If you do it that way, you need a seasoned group of people — and not all ED staff," she says.

She suggests including a staff member for every level of personnel, including a technician, nurse, secretary, and clinical nurse specialist. From outside the ED, she suggests including a nursing recruiter, a physician or medical director, and social worker.

Panel members don't always have to be from within your facility, she adds. "We actually utilized a paramedic from the EMS base station," she says. "We felt it was a good way to demonstrate community outreach and show alliance to our paramedic partners." ■

EMTALA Q & A

[Editor's Note: This column is part of an ongoing series that will address reader questions about the Emergency Medical Treatment and Labor Act (EMTALA). If you have a question you'd like answered, contact Staci Kusterbeck, Editor, ED Management, 280 Nassau Road, Huntington, NY 11743. Telephone: (631) 425-9760. Fax: (631) 271-1603. E-mail: StaciKusterbeck@aol.com.]

Question: If patients are triaged as "nonemergent" and leave after six to eight hours without treatment, is the facility at risk for an EMTALA violation?

Answer: Yes, according to **Gloria Frank**, JD, former lead enforcement official on EMTALA for the Centers for Medicaid and Medicare Services (CMS). She points to a 1999 *Special Advisory Bulletin* from CMS and the Office of Inspector General that clarified this issue.

Triage is considered a prioritization of care and not a medical screening examination (MSE), says **Mary Kay Boyle**, RN, JD, risk manager at North Penn Hospital in Lansdale, PA. "Patients must receive a MSE in order to determine if an emergency medical condition exists," she explains.

If upon completion of a MSE, the patient is determined to be nonurgent, then the determination is that an emergency medical condition does not exist and EMTALA no longer applies, says Boyle.

She adds that patients who are triaged and leave without receiving a medical screening examination because of a long time delay could be considered a constructive discharge, and there is a risk for an EMTALA violation. "In other words, the patient had no choice but to seek attention at another facility because of the time delay," says Boyle.

Question: If the patient collapses but was on their way to the ED within a 250-yard range, can you send a security guard and do basic life support, or are you held to an ED code response?

Answer: The response does not have to be to the same level as the response in-house, says Boyle. "It has to be what is reasonable and has to be consistent," she says. The hospital needs to develop a policy as to who will respond and the level of expertise, Boyle adds. "A hospital may elicit the assistance of EMS through calling 911," she says. Boyle adds that this should be discussed with the local EMS and a clear policy generated with the response team. "Realize, however, that 911 cannot be your only level of response in all situations," she cautions.

Question: Orthopedic injuries are routinely stabilized in the ED, then referred to their primary care provider. Is the facility at risk for a disparate care EMTALA violation, if these patients are not given appropriate and timely definitive care by an orthopedic specialist?

Answer: Not as long as the patient is stable for discharge, says Frank. She points to a recent court ruling on this issue.[1] "The patient was on Medicaid and had to get follow-up care for an orthopedic injury and eventually had to go 190 miles away to get surgery," says Frank.

The court ruled that this was not an EMTALA violation, because the patient was stable when he left the hospital, she explains. CMS has said it is not interested in this issue, adds Frank, referring to a recent U.S. General Accounting Office report on EMTALA. **(See resource box for information on obtaining the report, p. 46.)**

Presuming a screening exam is done on all orthopedic

Sources

For more information about the Emergency Medical Treatment and Labor Act, contact:

- **Mary Kay Boyle**, RN, JD, North Penn Hospital, 100 Medical Campus Drive, Lansdale, PA 19446. Telephone: (215) 361-4591. Fax (215) 412-5002. E-mail: MBoyle@nph.org.
- **Gloria Frank**, JD, P.O. Box 1340, Ellicott City, MD 21041. Telephone: (410) 480-9111.
- **Jonathan D. Lawrence**, MD, JD, FACEP, Emergency Department, St. Mary Medical Center, 1050 Linden Ave., Long Beach, CA 90813. Telephone: (562) 491-9090. E-mail: jdl28@cornell.edu.

patients in a similar manner, there is nothing wrong with sending them to their primary care provider once stabilized, says **Jonathan D. Lawrence**, MD, JD, FACEP, an ED physician and medical staff risk management liaison at St. Mary Medical Center in Long Beach, CA.

"The key here is to remember the EMTALA definition of 'stabilized,'" he says. "Stabilized under EMTALA is a condition under which no reasonable expectation of deterioration will take place once the patient is transferred." He notes that "transfer" also means discharge under EMTALA.

According to Lawrence, most fractures are thus stabilized once immobilized, and there is a window of several days for definitive orthopedic attention. "If the patient is not stable — for example, he or she has an open fracture requiring OR irrigation, or one associated with neuro or vascular compromise — then naturally an orthopedist must be consulted from the ED," he says.

If the fracture does not require immediate attention, referral to a primary care provider can be appropriate, Lawrence adds. "The ED is not a guarantor that the primary care provider will do the right thing," says Lawrence. If the standard in the community is for a primary care provider or clinic to refer fractures to an orthopedist, they must meet that standard, he explains.

Referral to an orthopedist is considered a transfer, notes Boyle. "If patients are not treated in an appropriate and timely fashion, this could be considered disparate care," he says. Boyle says that the best way to overcome this problem is to make sure that the ED maintains an on-call schedule for consults and referrals.

"Physicians on this schedule need to understand their responsibilities," she underscores. "If there are problems with physician response, the issues need to be addressed through the appropriate hospital channels."

Reference

1. *Phipps v. Bristol Regional Medical Center*, 117 F.3rd 1421, Sixth Circuit, 1997. ■

Resources

The U.S. General Accounting Office (GAO) June 22, 2001, report titled *Emergency Care: EMTALA Implementation and Enforcement Issues,* can be downloaded from the GAO web site (www.gao.gov). Click on "GAO Reports," then "Find GAO Reports." In the box, "Find reports by report number," enter GAO-01-747. Single copies are available at no charge. To order a copy, contact:

- U.S. General Accounting Office, P.O. Box 37050, Washington, DC 20013. Telephone: (202) 512-6000. Fax: (202) 512-6061.

Audioconferences target disasters, disclosure

Have you missed one of American Health Consultants' (AHC) recent audio conferences? If so, two upcoming conference replays offer another opportunity to take advantage of excellent continuing education opportunities for your entire facility.

Disaster Response at Ground Zero: How NYU Downtown Hospital Handled Mass Casualties With All System Down, originally held on Jan. 10, takes participants to the heart of the World Trade Center disaster on Sept. 11. Learn how to prepare your facility for the unthinkable. The replay will be available from 8:30 a.m. on Tuesday, April 16, to 5:30 p.m. on Wednesday, April 17. Current AHC subscribers pay $249, which includes free CME and CE credit. The cost is $299 for nonsubscribers.

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CE/CME objectives

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

• Name one requirement for the screening indicators included in new staffing standards from the Joint Commission. (See "New JCAHO staffing standards: You may be surprised at what you need to do.")

• Identify one question that Joint Commission surveyors may ask your staff to assess compliance with staffing standards. (See "Here are the questions surveyors will ask.")

• Name one way to effectively implement point of care testing (See: Here's how to make point of care testing a success.")

• List a potential disadvantage of point-of-care testing in the ED. (See "Consider pros and cons of point-of-care testing.")

• Cite one benefit of using a panel interviewing process. (See "Ask staff to help choose the right nurse manager.")

• Explain how to comply with EMTALA when a patient is within 250 yards of the ED. (See "EMTALA Q&A.")

For more information on the CE/CME program, contact: Customer Service, American Health Consultants, P.O. Box 740056, Atlanta, GA, 30374. Telephone: (800) 688-2421. Fax: (800) 284-3291. E-mail: customer service@ahcpub.com. Web: www. ahcpub.com.

CE/CME questions

37. Which of the following is a requirement for screening indicators outlined in new staffing assessment standards from the Joint Commission on Accreditation of Healthcare Organizations?
    A. discontinuing the inclusion of human resources indicators
    B. use of clinical and human resources indicators to assess staffing
    C. use of only clinical indicators to assess staffing
    D. selection of only one indicator

38. When assessing compliance with new staffing standards, which will Joint Commission surveyors be asking about, according to Kathleen Catalano, RN, JD, director of administrative projects at Children's Medical Center of Dallas?
    A. if use of technicians is adequately limited
    B. whether your ED has a higher percentage of nurses than technicians
    C. if a system is in place to ensure adequate staffing
    D. evidence that all nurses are certified in pediatric advanced life support

39. Which is recommended for effective implementation of point-of-care testing by Michelle Myers Glower, RN, MS, former director of emergency and trauma services for Elmhurst Hospital and a consultant specializing in staffing issues?
    A. using point-of-care testing to ensure timely

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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.

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discharge of patients
B. allowing the laboratory to collect all revenues for point of care testing
C. selecting a point-of-care instrument without quantitative results
D. waiting to resolve differences pertaining to revenue distribution until after implementation

40. Which is a disadvantage of point-of-care testing in the ED, according to Thomas J. Allred, MD, FCAP FACEP, associate professor of emergency medicine and pathology at Medical College of Georgia?
A. The quality of care is poor.
B. Regulatory requirements are never waived when tests are performed inthe ED.
C. A higher level of proficiency testing is required for testing doneoutside of the hospital laboratory.
D. There are significant requirements for quality control andproficiency testing.

41. Which is a benefit of using panel interviewing to select an ED nurse manager, according to Colleen Bock-Laudenslager, MS, RN, a consultant who specializes in staffing?
A. Nurses are able to make the final selection with no input from Administration.
B. Staff members feel their opinion is valued.
C. There is a greater chance of success for intern candidates.
D. The process results in a significant cost savings.

42. To comply with the Emergency Medical Treatment and Labor Act, what should be done if a patient requires treatment within the 250-yard range of your ED, according to Mary Kay Boyle, RN, JD, risk manager at North Penn Hospital?
A. The response must be at the same level as the in-house response.
B. You may call 911 for assistance from emergency medical services (EMS).
C. EMS should not be contacted.
D. Calling 911 with no additional response from the ED is acceptable.

Jerry L. Pettis VA Memorial Medical Center

EMERGENCY DEPARTMENT NURSE MANAGER
Search Committee Ballot

INTRODUCTION: As you know, your current Nurse Manager has accepted a position at another facility. VAMC Loma Linda has benefited from their leadership and we will miss his/her presence.

We are quickly establishing a selection committee and are pursuing internal and external candidates for their replacement. Should you know of any leader either within the facility or outside . . . do not hesitate to have them contact us ASAP.

***PURPOSE* of this Ballot:**

- To establish qualities **you deem** important in the role of Nurse Manager of ED. This will assist the committee in selecting the appropriate professional for the needs of the unit.
- To establish the ED employee(s) you most like to represent your health care team on the selection committee.

INSTRUCTIONS: Complete the sections below as indicated and return to _____ by _____.
(Date)

Should you have any questions, contact _____
at Ext. _____ or pager _____

Please rate the following Nurse Manager **qualities** in priority order of importance/preference:

_____ Clinical practice expertise in ED nursing
_____ Management/Leadership expertise
_____ Educational background/Degree
_____ Communication skills/Conflict resolution expertise
_____ _____ (Write in)
_____ _____ (Write in)

BALLOT

Place the name of the ED employee you would like to have represent your health care team on the Search Committee:

_____

Source: Jerry L. Pettis VA Memorial Medical Center, Loma Linda, CA.

BIOTERRORISM WATCH

Preparing for and responding to biological, chemical and nuclear disasters

Building a bridge over the abyss: Will bioterrorism help bring disjointed health system together?

Getting in same boat as 'tsunami' of money builds

Diverse and disjointed, the nation's public health and clinical settings have education needs and communication gaps that must be bridged if the system is to improve its response to bioterrorism, a group of consultants recently told the Atlanta-based Centers for Disease Control and Prevention (CDC).

The CDC's national center for infectious diseases is holding a series of meetings to assess the lessons of last year's anthrax attacks and begin to close the long-standing breach between public health and clinical medicine.

The gap may stem from differences between the private and public health care systems, both of which are fragmented and highly variable by geography and urban vs. rural settings, according to a CDC draft summary of the Jan. 7, 2002, consultants' meeting, which was obtained by *Bioterrorism Watch.*

Seeking collaboration

"There was lot of [discussion] about the gap between public health, private practices, and hospitals and how to bridge that gap and make things more collaborative," said **William Scheckler**, MD, a consultant at the meeting and hospital epidemiologist at St. Mary's Hospital in Madison, WI. "[We need] to reduce some of the redundancies in the systems both in terms of preparing and education."

Scheckler also is a member of the CDC Healthcare Infection Control Practices Advisory Committee (HICPAC), which met Feb. 25-26, 2002, in Atlanta.

Scheckler gave a report on the consultants' meeting, telling HICPAC members that the CDC had input from a broad range of bioterrorism groups and clinical specialties. There is a wealth of information scattered among these groups and on numerous web sites, he noted. For example, a dermatology group at the meeting has photographs of skin lesions that could be a good resource in an investigation of cutaneous anthrax.

"When an outbreak occurs, the same questions [arise]: What do people need to know? What is the best way to get out the information?" he said. "There should be one best-practices web page that you can go to."

The CDC currently operates several different clearinghouses for information as well as different public inquiry numbers. The agency now is considering the possibility of centralizing its clearinghouses and public inquiry services, the CDC report states.

"During the anthrax crisis, the CDC public inquiry system was overwhelmed, and therefore the agency set up a new system during the outbreak," the CDC report continues.

In addition, the CDC found that "during the attacks, the amount of information on anthrax increased from virtually nothing to an overwhelming number of e-mails, web sites, printed

This supplement was written by Gary Evans, editor of *Hospital Infection Control*. Telephone: (706) 742-2515. E-mail: gary.evans@ahcpub.com.

documents, and other materials. Much of this information and work was duplicative."

The consultants suggested that the CDC devise a strategy to centralize information development activities and then distribute the product, rather than having so many individuals working independently. **(See CDC action items, below right.)**

Linking the data base

Regarding public health and clinical partnerships, a relatively simple system of linking health departments with hospital emergency departments (ED) was described by HICPAC member **Alfred DeMaria Jr.**, MD, state epidemiologist at the Massachusetts Department of Public Health in Jamaica Plain.

Under the program, participating hospitals in the Boston area report their daily number of ED visits to the health department. The numbers are compared against emergency visits a week earlier and on the same date a year prior to detect surges that might suggest a bioterrorism event, he said.

The information is easily obtainable by the hospitals and can be submitted electronically to the health department without extra work. That is important because bioterrorism surveillance systems that are labor-intensive will likely falter as vigilance inevitably wanes, DeMaria noted.

The system has provided the secondary gain of improving communication between public health and clinical sectors. The threshold for investigation occurs at two orders of magnitude above baseline, which thus far has occurred with influenza ED visits and those associated with a large trauma event such as a bus crash, he said.

Sometimes, the threshold will be reached simply out of random chance, as ED visits increase for no single reason. "The question is, we don't know how big an event has to happen [to be detected]," DeMaria said.

The CDC is interested in such bioterrorism surveillance systems, and also may seek to apply its existing hospital sentinel networks, including the National Nosocomial Infections Surveillance system, said **Steve Solomon**, MD, chief of special studies activity in the CDC division of healthcare quality promotion.

National concerns about patient safety and bioterrorism have created a "tsunami of money" to address such issues, Solomon told HICPAC members.

"We have a lot of concerns about the surveillance and response needs," he said. "We are seeking a small trickle of that tidal wave of funds."

Ultimately, the CDC may help shape a national system or contribute to a "mosaic" of systems that track surrogate markers such as severity of illness in "real time," he said.

The research and development needs for such a system are in the ballpark of $120 million to $180 million, which may be available in the current climate over the next four or five years, he said. There is considerable interest being expressed from health care-related industries in partnering with the CDC on such efforts.

"They are standing in line," Solomon told HICPAC members. "The phone is ringing off the hook. We are trying to figure out who is the best partner." ■

CDC gets plenty of advice for action

Clarify roles, make info user-friendly

A recent consultants' brainstorming session on education and communication needs for bioterrorism resulted in numerous suggestions to the Centers for Disease Control and Prevention (CDC) in Atlanta. Some of the points of information and recommended items for action included:

- ✔ Strengthen the CDC Health Alert Network e-mail notification system to ensure that all state and local health departments are involved.
- ✔ Make surveillance and reporting as automatic as possible, and do not depend on the clinician to initiate the report quickly.
- ✔ Because the CDC is recognized as an authoritative source for information provided through *Morbidity and Mortality Weekly Report* and press releases, the CDC web site should be changed to make it more user-friendly.
- ✔ Ruling out disease is the most important clinical issue, rather than identifying new cases of disease.
- ✔ Clarify roles when a criminal investigation is going to occur during a public health emergency.
- ✔ Develop a prototype disaster plan for use by communities and make it readily available.
- ✔ The cacophony of information is a problem. For clinicians, an appropriate tool would be a page of bulleted information necessary for the

clinical setting. This should be provided in addition to baseline information.

✔ The CDC smallpox plan is a good model for allowing outside review during the development phase.

✔ Identify additional ways for using communication technology, particularly e-mail, to link local resources together. ■

Was anthrax mailer a bioweapons researcher?

'This has military lab stamped all over it'

Given the difficulty of creating high-quality anthrax in a civilian research lab, the original source of the *Bacillus anthracis* that killed five people last year was likely a U.S. bioweapons facility, the president of the American Society of Microbiology (ASM) tells *Bioterrorism Watch*.

"Given the high quality of the preparation that was used, this has military laboratory stamped all over it," says **Abigail Salyers**, PhD, ASM president and a professor of microbiology at the University of Illinois in Urbana-Champaign.

The U.S. bioweapons program was formally disbanded as part of a global treaty in the early 1970s, but many military labs remained open for "biodefense" research to counter bioterrorism, she says. "These anthrax spore preparations last for decades," Salyers says.

Anthrax mailer is 'criminal, but not stupid'

The atmosphere of a university research lab is too open and freewheeling for someone to produce anthrax undetected, she says. Salyers' personal theory is that someone who worked in a military bioweapons laboratory stole the anthrax, possibly years ago.

"It's anybody's guess as to what is going on here, but I would be astounded if this came out of a university laboratory," she says. "[This person] is crazy, criminal, but not stupid. I can't imagine that anybody who was going to do that would take the trouble and risk of trying to do that in a university laboratory environment."

In a related matter — despite a published report to the contrary — the Federal Bureau of Investigation denies it has narrowed its anthrax investigation to a former scientist in a U.S. bioweapons lab.

A FBI spokeswoman at the agency's national office in Washington, DC, told *Bioterrorism Watch* that the agency has not identified "a prime suspect" in the hundreds of interviews it has conducted in the investigation.

A story that was published in the Feb. 25, 2002, *Washington Times* reported that the FBI's search was focusing on a former U.S. scientist who worked at a government bioweapons laboratory. The government's chief suspect, the article reported, is believed to have worked at the U.S. Army Medical Research Institute of Infectious Diseases at Fort Detrick, MD, which has maintained stores of weapons-grade anthrax. No charges had been filed as this issue of *Bioterrorism Watch* went to press.

Do you know this person?

Salyers described her theory on the case — before the newspaper report was published — when the FBI openly solicited help from the ASM in the investigation. In a message appealing for help from ASM members, **Van Harp**, assistant director of the FBI's Washington, DC, field office, said "a single person" is most likely responsible for the mailings. "It is very likely that one or more of you know this individual," he told ASM members.

A $2.5 million dollar award is offered to anyone providing information that leads to an arrest of the bioterrorist. The FBI profile describes a socially withdrawn person who has "a clear, rational thought process" and is very organized. "The perpetrator might be described as 'standoffish' and likely prefers to work in isolation as opposed to a group/team setting," Harp told the ASM. It is possible the mailer used off-hours in a laboratory or may have even established an improvised, concealed facility to produce the anthrax, the FBI profile noted.

"The person is experienced working in a laboratory," Harp told the ASM. "Based on his or her selection of the Ames strain of *Bacillus anthracis,* one would expect that this individual has or had legitimate access to select biological agents at some time. This person has the technical knowledge and/or expertise to produce a highly refined and deadly product."

Indeed, the Ames strain used in the attacks has been used in bioweapons research both in the United States and worldwide, Salyers says. In

addition, given the elaborate research protocol required, it is unlikely a university laboratorian creating anthrax would go undetected no matter how "standoffish" he or she was.

"I'm just telling you what you have to go through if you were crazy enough to be a bioterrorist," Salyers says. "If a deranged scientist tried to do this in a university laboratory, red flags would be going up all along the way."

Recipe for disaster

The first step — cultivating the bacteria and producing spores — is something that almost any microbiologist could do, she says.

"But you get this slush, and that is not going to hurt anybody," she says. "There are people who will tell you that you can do this the hard way with a mortar and pestle and grind it up in the laboratory. But it is clear that the powder that was in the letters was a much higher quality than that."

The anthrax "slush" must be ground into a fine powder to be capable of getting past human respiratory defenses. "The machinery for doing this is mostly in military research laboratories," Salyers says. In addition, sophisticated treatment of the spores must be done to defeat their general property of clumping and sticking together.

"You would want to treat the spores so that they don't stick together and also so that you get a preparation that is very volatile — goes into the air and stays in the air," she adds.

Regardless of whether the mailer worked in a military lab or other facility, there is growing consensus that the attacks were not the work of foreign terrorists.

"The current thinking among many people is that this is a domestic event that kind of occurred in the slipstream of 9/11," says **William Schaffner**, MD, ASM member and chairman of preventive medicine at the Vanderbilt University School of Medicine in Nashville, TN.

"The [FBI profile] characteristics don't seem terribly surprising. They seem akin to the kind of characteristics that were part of the picture of [the Unabomber] Ted Kaczynski — a disgruntled person who is very bright, and in this instance, has a substantial amount of professional and technological expertise in order to carry this off."

[Editor's note: Those who think they may have information relevant to the case can contact the FBI via telephone at (800) CRIME TV — (800) 274-6388 — or via e-mail: Amerithrax@FBI.gov.] ■

Bioterrorism forensics: The burden of proof

If bug does not fit, you must acquit?

Already asked by federal investigators to assist in finding the anthrax mailer, the American Society of Microbiology (ASM) is taking the next step and discussing the emerging science of bioterrorism forensics.

Despite an impressive array of scientific methods, primarily used in health care epidemiology and outbreak investigations, linking a pathogen to a terrorist will not be easy.

"You want to trace it back to the 'smoking gun,' says **Abigail Salyers**, PhD, ASM president and a professor of microbiology at the University of Illinois in Urbana-Champaign. "We know how to tell what bullet came from what particular gun. But when it is bacteria, viruses, or other microorganisms we really don't have established forensics for that."

To address the issue, the ASM will hold meetings later this year that may result in a booklet on how to use molecular epidemiology techniques to establish a chain of evidence rather than identify the source of an outbreak, she says.

The methods typically used by outbreak investigators include DNA fingerprinting and pulsed-field gel electrophoresis. But using such methods to link a bioterrorist to a biological weapon would be unprecedented, Salyers notes. "Suppose they find somebody [who] might have perpetrated the [anthrax attacks], and they find some spores on that person or the immediate environment."

"Trying to prove that that is the [exact strain] will be unprecedented. It is not just a question of finding the person. It is a question of what are going to be the legally binding types of evidence," Salyers explains.

Another problem in the anthrax attacks is the separation of act and outcome, she says. As opposed to a bomb exploding and leaving an immediate impact, the anthrax mailer had time to dispose of evidence after the mailings.

"You have a perpetration of an act and the consequences of the act separated by nearly a month," she says. "There has been a lot of time for the perpetrator to cover up tracks. This is very different from putting nerve gas into a subway system, where the cause and effect are very close together," Salyers adds. ■