



Management[®]

The monthly update on Emergency Department Management



Do you have the time — or the money — to offer HIV screenings?

New CDC guidelines encourage all EDs to offer testing

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Offering routine HIV testing to ED patients is something that probably sounds good to an ED manager with a strong sense of his or her public health mission. It also is, however, something more easily thought than done.

Due to the considerable barriers to such programs (for example, cost, lack of staff, and lack of time), only 30-50 EDs in the country have one in place. There is hope, however, that things soon may improve. The Centers for Disease Control and Prevention (CDC) soon will revise its guidelines to ease the burdens for EDs and to encourage all EDs to offer these tests. **(For more information on the proposed guidelines, see story on p. 63.)**

Meanwhile, some creative ED managers are finding ways to surmount those barriers. For example, Jackson Memorial Hospital in Miami has just begun offering routine HIV tests free of charge to all patients who are admitted to their ED with a medical problem, and the University of Cincinnati Hospital has had a program in place for years.

Still, they are definitely in the minority. "Most EDs will not do testing for this disease, because the process includes obtaining informed consent, providing counsel, maintaining confidentiality, and ensuring appropriate follow-up," explains **James Augustine**, MD, FACEP director of clinical operations at Emergency Medicine Physicians in Canton, OH. "Each of those steps is more difficult in the

Executive Summary

If you want to have a successful HIV testing program, make sure you have sufficient financing in place, sufficient time to handle the additional testing, and adequate counseling staff available.

- New guidelines from the Centers for Disease Control and Prevention encourage all EDs to offer HIV testing.
- Plan on annual costs of \$300,000-\$400,000. If your hospital won't provide the funds, government grants are an excellent source.
- If you can't hire counselors, form a partnership with your public health department.
- New rapid testing can cut down on time constraints; be aware, however, that they are not 100% accurate.

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ED than in a clinic or a primary care physician's office, given the time constraints."

In addition, he notes, many of the test results can take days to return, and it's difficult for an ED to get that information back to the patient. "This has improved with the new rapid testing," he concedes, "but it remains challenging for an ED to provide all of the elements necessary."

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In addition, note ED managers, providing the necessary counseling staff can be an unbearable financial burden for an ED. "Our policy is we don't do it," says **David Vukich**, MD, professor and chairman of the department of emergency medicine in the University of Florida College of Medicine, Jacksonville, and chief medical officer for Shands Jacksonville (FL) Hospital System.

For a while, Vukich's facility had partnered with the local public health department and provided a testing program under a grant the department had received. However, when the money ran out, the program ceased. "We want to help, but this is really a [tricky situation]," he says. Once you start doing it, the requirements for pre- and post-counseling, mandated by the Florida legislature, become attached to it, Vukich says. "There is no continuity of care because there's almost a zero chance you'll see the same doc again," he says. In addition, he notes, it would cost his facility \$300,000 to \$400,000 to provide such services in-house.

The ED at the University of Cincinnati Hospital does have an ongoing program, says **Michael Lyons**, MD, a faculty physician in the ED and assistant professor of emergency medicine in the department of emergency medicine at the University of Cincinnati College of Medicine. However, he adds, "We compete every three years for funding from the Ohio health department and have been funded continuously since 1998."

The grant, Lyons says, basically supports the \$150,000 per year program, which primarily screens high-risk patients.

EDs need financial help

David Gurr, MD, Jackson Memorial's associate director for emergency services, concedes that his new HIV testing program also will not be possible without outside help; he just doesn't know how much it ultimately will need.

The Miami-Dade Department of Health is paying for the testing kits, which cost \$12 each, and a \$100,000 grant from Foster City, CA-based Gilead Sciences, which makes HIV medications, is paying staff salaries for the first year. "Currently, we have five workers," he reports. "But we don't really know how many people will say 'yes' to testing."

Gurr's ED sees about 300 adults per day, he says. "We know from other studies that about 40% who are asked will say yes," he says. "If that holds true, we will be overwhelmed." In fact, he notes, he is working to obtain a grant from the CDC.

Lyons concedes that his program, which does not

use any health department staff, does not have funding sufficient to its task. “We test between 1,200 and 1,500 patients a year out of the 85,000 patients we see,” he says. “I’m sure the number we would like to test would be higher than that.”

University of Cincinnati Hospital is not a high-prevalence environment for HIV, Lyons says. “We know we can’t test everyone, so we try to maximize testing for those at risk,” he says. Patients receive screening based on risk factors, which can include areas such as intravenous drug use to medical issues the physician considers to be consistent with HIV/AIDS, he notes.

Vukich insists, “We want to do this, and if the funding were put in place we would. It’s not rocket science; it’s what you are funded to do.”

A complicated process

While it may not be rocket science, the process does involve several critical steps and follow-through on the part of the ED staff.

“We have posters up in the waiting room and the lobby, advising patients that they may be asked if they want to take an HIV test,” Gurr shares. He says a group of state-certified counselors who are employed by the hospital look through the charts to obtain ED patients’ names and make sure they are of an appropriate age (ages 13–64, per CDC guidelines). If no one has yet offered them the option of testing, they do so.

“They will go around asking patients if they are willing to be tested and will give counseling before the test if they agree,” he explains. Every patient — whether they test positive or negative — then receives post-test counseling. “If they are positive, we have a South Florida AIDS Network on campus, and they will

be set up with case a manager who will help them get into a clinic and be put on whatever meds they may need,” says Gurr.

The key is that these risk factors are systematically applied, says Lyons, noting that he and another physician provide oversight for the program. “We have a few program coordinators at the level of nurse or highly trained social workers,” he says.

Those staff place follow-up phone calls to the patients. “It is resource-intensive,” says Lyons. “You can get a number of false-positives in low-prevalence environments.” All positive results are given in person; for negative results, the staff have the option of contacting the patient by phone.

During the grant period, Vukich says the public health department sent one of its employees to the ED to provide the blood draws and offers any patients who wanted the test pretest counseling. “That ran for the length of the grant and worked pretty well,” he says.

Testing can make a difference

Lyons says his data indicate that these programs can contribute significantly to the battle against AIDS/HIV.

“I think we’ve had a lot of success,” he reports. “Our results show that in our ED, we identified around 10% of all the people identified in the region, and 25% of all those tested from publicly funded test centers.”

Could programs like this be replicated in any ED? “If you had someone relatively sophisticated — at least a technician — you could probably do it for a couple hundred thousand a year for salaries, plus lab costs, then a lot of in-kind contributions from the hospital,” says Vukich. The total annual cost would be \$300,000–\$400,000, he estimates.

“Of course, that is volume-dependent,” Vukich continues. In a large ED, you’d have to provide testing 24/7, he says. “You might be able to cut your costs by one-third if you only provided testing during the big volume times: from noon to midnight.” ■

Sources

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- **Mike Lyons**, MD, Assistant Professor of Emergency Medicine, Department of Emergency Medicine, University of Cincinnati College of Medicine. Phone: (513) 558-8629.
- **David Vukich**, MD, Professor and Chairman, Department of Emergency Medicine, College of Medicine, University of Florida; Chief Medical Officer, Shands Jacksonville Hospital System, Jacksonville. Phone: (904) 244-4107.

CDC to change HIV test guidelines

In recognition of some of the challenges noted by ED managers regarding HIV testing, the Centers for Disease Control and Prevention is modifying its guidelines for HIV screening and testing in medical facilities. The new guidelines, which are out for comment, would make HIV testing a standard part of medical care in all health care settings, including the ED. They

include the following:

- The screening of every person 13-64, regardless of risk or prevalence. (Repeat testing would only be recommended for those at high risk).

- Testing should be part of a general battery of tests. There would be no need for separate consent for HIV testing.

- Counseling services should be focused on those who test positive. Pretest counseling would not be a requirement.

“A big part of the reason for these proposed changes is that we recognized as we looked at surveys [of providers] that the requirements of counseling and informed consent were serving as barriers,” notes **Bernard Branson**, MD, the CDC’s associate director for laboratory diagnostics, Division of HIV/AIDS Prevention, and one of the authors of the proposed guidelines. They were in place to protect patients when there was not much information available, Branson says. “Those things have now become counterproductive, so we have new recommendations — and have in fact split off health care settings from other kinds of testing settings,” he says.

He adds that demonstration projects conducted in several EDs by the CDC indicate that even the concern about follow-up can be overcome. “The recommendations essentially call for a continuum care, but what we have shown in demonstration projects is that when they did rapid testing, most EDs worked out an arrangement for an AIDS clinic where the patient could go to get confirmatory results, so the ED will not have to undertake it,” Branson explains. Many ED managers complain that they don’t have the staff or the time to follow up with all patients after HIV testing.

He points to one of the projects, at Alameda County Medical Center in Oakland, CA, where the triage nurse offered testing to everyone who came to the ED. “Using an oral fluid rapid HIV test, the nurse offers the test, conducts it, and interprets the result,” says Branson. The ED has a guaranteed drop-in appointment slot at a clinic, so when they test someone as positive, they can automatically put them into that slot.

While these new guidelines, set to be finalized this summer, may sound like the ultimate solution to the problem, emergency medicine experts remain skeptical. First, they note, rapid testing still is subject to erroneous results. In addition, state regulations often can be in conflict with the CDC guidelines. For example, regardless of the process the ED would prefer, “Most states require pre- and post-testing,” notes **David Gurr**, MD, associate director for emergency services at Jackson Memorial Hospital in Miami. “In Florida, for example, the state requires that *you* do the follow-up on any test you order.”

Source

For more information on the Center for Disease Control and Prevention’s HIV testing policy, contact:

- **Bernard Branson**, MD, Associate Director for Laboratory Diagnostics, Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta. E-mail: bbranson@cdc.gov.

Branson concedes this requirement could be an obstacle. The model the CDC proposes is the one in Texas. “They have an ideal informed consent policy,” he says. “In a medical care setting, when a person has signed the form for a medical exam and testing, there are no additional requirements, so you don’t have to jump through that extra hoop.”

The new guidelines also would not solve the problem of the high cost of testing. “Since we recommend testing across the board, we anticipate the tests will be reimbursable if the patient is covered by Medicare or Medicaid,” says Branson, “But there will need to be public funds.” ■

Fingerprint scanners help improve record security

Benefits outweigh some initial glitches

St. John’s Mercy Medical Center in Chesterfield, MO, has found a high-tech solution to the challenge of balancing the need for security of patient records with easy access for physicians and staff.

In July 2005, the ED began testing a system from Sentillion in Andover, MA, that uses fingerprint scanners and identification badges that automatically can unlock a computer when the authorized user approaches. Each person authorized to use the computer terminal wears a special “proximity” badge that looks similar to any other plastic identification badge. When the user approaches within a few feet of the terminal, the computer automatically unlocks. The user verifies his or her identity by placing a finger in a small reader.

Dennis Keithly, MD, FACEP, chairman of the ED, and **Jennifer Cordia**, RN, BSN, ED director, are enthusiastic about the new system. However, Keithly concedes, as with any technology solution, the implementation process has not been without its challenges. “We have had some difficulties, requiring us to deactivate a fair amount of the system,” he notes. “Personally, however, I love it.”

Executive Summary

Technological solutions such as fingerprint scanners and identification badges provide greater computer security and piece of mind for your staff, according to ED managers at St. John's Mercy Medical Center in Chesterfield, MO.

- 'Proximity badge' is the computer log in, and staff member's fingerprint is their password.
- Busy physicians and nurses can leave the department to see patients in waiting areas without worrying about someone accessing their computer.
- Staff has noted some system glitches, including the need to place fingers in the scanner several times.

Cordia adds, "I *really* like it. In fact, I'd like to see it used on more than just computers."

Another bonus, says Keithly, is that the scanners haven't cost the ED a penny. They come out of the health system's information technology (IT) budget, he explains.

Control, privacy ensured

The strong point of the system is that it gives you absolute privacy and control over the terminal, says Keithly.

"Our department is crowded, and commonly we will have patients in corridors and not in regular exam rooms," he says. "While you're treating them there, however, nobody can access your computer without your presence."

You turn your badge on by pushing a tiny button on the bottom of the badge, he notes. "It's good for eight hours, and with additional clicks it can go to 10," he says. (The longest ED shifts are 10 hours. If a staffer stays beyond that period, they can log off and then be assigned to another computer with another badge.) When you push the button, a tiny light flashes that indicates it has been activated.

In effect, Keithly explains, the proximity badge is the log in, and the fingerprint is the password. "You go to the computer, which reads the badge and throws up a name recognition screen; then, you can use the fingerprint reader, and it will throw your page up," he explains. If you walk away, the screen goes blank and comes on only when you walk back.

In addition to the privacy benefits, Cordia says the system is a big timesaver.

The ED is different than other areas because they have to get in and out of their computers so quickly, she says. "It's difficult to have to log in and put in your password and keep doing it," she says. "The ease of a single sign-on combined with the fingerprint scanner

is a real timesaver."

While it may save only a minute or so with a given user, "that adds up," Cordia insists. In addition, she says, it ensures better compliance in terms of individuals logging in and out. "In a more traditional system, a single computer may typically run one whole day on one person's log-in," she says.

Staff complaints noted

Keithly says the reason that some of the system is down is because there have been some staff complaints.

"One person said if someone sat next to you, the machine might read their badge, so it can override your badge and gain control of the computer," he says. "As for the finger readers, sometimes you have to shift from one hand to another because it doesn't always pick up your first finger."

Keithly's not convinced, however, that all problems with sign-off reside with the system. "My opinion is the user turned away and it shielded their badge from the screen," he offers.

Cordia also thinks the problem may lie with the badges and not the reader. "The problem is they came up with both pieces at the same time, so people tend to blame one part of the system on the other," she says.

As for the fingerprint reader, she says if you're careful placing your finger properly on the reader and not pressing too hard, there are no problems. "The nursing staff really likes that piece," she says.

Keithly says he *loves* the system and still is happy to use it. "I regret we're not active on all our machines right now," he says. In fact, he adds, the scanner is scheduled to go hospitalwide. "I'm anxious to bring it back [full force] and work out any kinks." ■

Sources/Resource

For more information on fingerprint scanners, contact:

- **Jennifer Cordia**, RN, BSN, ED Director, St. John's Mercy Medical Center, Chesterfield, MO. Phone: (314) 251-6251.
- **Dennis Keithly**, MD, FACEP, Chairman, Emergency Department, St. John's Mercy Medical Center, Chesterfield, MO. Phone: (314) 251-6816.

For more information on the technology of fingerprint scanners and identification badges, contact:

- **Sentillion**, 40 Shattuck Road, Suite 200, Andover, MA 01810. Phone: (978) 689-9095. Fax: (978) 688-2313. E-mail (general information): info@sentillion.com. E-mail (sales): sales@sentillion.com.

ED diversions banned by Seattle-area hospitals

Critically ill to go by ambulance to nearest facility

A new policy in King County, WA, means that hospitals in the area, which includes Seattle, will no longer go on diversion. The policy, adopted by the Central Region Emergency Medical Services & Trauma Care Council, requires critically ill patients to be taken by ambulance to the hospital of their choice or the nearest hospital — even if it doesn't have room for them.

"It hasn't even been a month, but I can already tell you that the pre-hospital care providers have noticed a huge difference," says **Chris Martin**, RN, BSN, administrative director of the ED at Harborview Medical Center in Seattle, and chair of the council. "Hospital administrators have all agreed that diversion is really a throughput problem and not an ED problem, and they've agreed to work long and hard to get beds open."

They were hearing anecdotally that pre-hospital care providers were having a hard time finding hospitals to take patients, she recalls. "The hospitals to which the patients were taken would be 30-40 miles from where they were," Martin says. "In addition to being too far to travel for definitive care, this took some medic units out of their service areas."

This difficulty was confirmed by the Hospital Capacity Web Site — a countywide site administered by Harborview that registers each time an area hospital goes on divert. "If you look on the screen, you'll see the emergency status: green is all open; red means divert," explains Martin, noting that updates are made twice a day or if the status changes. "I asked our technical person to run some reports, and they were right: We had hospitals on divert 30% of the time," she reports.

Martin brought the issue to the council, where pre-hospital providers who are council members made their case. "Every hospital agreed that diversion was the

Executive Summary

With the proper system, EDs truly can avoid diversions without becoming too overloaded to handle critically ill patients.

- A "fail-safe" process that allows EDs to go on saturation for two hours acts as a safety valve to ensure flow.
- When all EDs in the area agree to the same procedures, it avoids any single ED becoming overwhelmed by an influx of patients.
- Working in cooperation with other EDs gives your argument greater weight when asking administrators to take a hospitalwide approach to flow improvement.

Sources

For more information on ED diversions contact:

- **Chris Martin**, RN, BSN, ED Administrative Director, Harborview Medical Center, Seattle. Phone: (206) 731-4097. E-mail: clmartin@u.washington.edu.
- **Vicki Seaman**, RN, ED Director, Auburn Regional Medical Center, Seattle. Phone: (253) 333-2561.

ethically wrong thing to do," says Martin. The group decided to reconvene in four weeks after conferring with their administrators. When they returned, they voted unanimously to no longer use the word "divert" and to always remain open for life-threatening cases.

If a hospital is *very* overloaded, they can go on "ED saturation" two hours at a time, and then will go back to green, Martin says. "They can only do this for a total of six hours in every 24, so, theoretically, a hospital could still go red, but it doesn't *ever* count as red for a critical patient," she says.

How do the EDs handle incoming critically ill patients when they're crowded, don't have sufficient staff, and/or don't have beds? "I can't say we ever don't have sufficient staff," says **Vicki Seaman**, RN, director of the ED at Auburn (WA) Regional Medical Center. They simply rearrange staff for low and high acuity, Seaman says. "If we have to manage the patient in the ED for awhile, we can do it because most of our nurses have critical care backgrounds, so it's not something they're not used to managing," she says.

Adjusting the system

To accommodate the new policy, says Martin, adjustments had to be made to the web site. "We had to reconfigure it because we now have three colors: green for go, red for ED saturation — which has to be timed out after two hours — and yellow for treat and transfer, when you can't find an open bed," she says.

Martin says having a large group address the problem made it easier to solve it. "All us who live and breathe this problem in the ED recognize this as a *hospital* problem, not an ED problem — that EDs are overcrowded and backed up most of the time because their patients could not get to beds," she says. "But sometimes, until as an administrator you are forced to face the issue, you may not have been looking too hard at it."

There *were* beds open and not occupied, but administrators did not believe they had the staff to take care of them, Seaman explains. "Each hospital had to look internally at what they were doing to see the problem," she says.

Seaman already has seen significant improvement. “There have been occasions when someone had to go on ED saturation, but much less frequently than before,” she notes. Every facility is taking patients, so no one place is hit with a huge influx of ambulances and medics, Seaman says. “I do believe the flow is better, and medics believe that, too,” she says. “They don’t have to search for EDs like they had to before.” ■

ED located next to ICU to bolster patient safety

Staff from both departments can lend a hand

How far is your ED from the intensive care unit (ICU)? How far is it from radiology? What about surgery? At the new St. Joseph’s Hospital in West Bend, WI, they are all a few steps away, and this was literally by design.

In the wake of the Institute of Medicine’s landmark 1999 patient safety report, *To Err is Human*, the hospital’s leaders — who were considering a replacement facility — began to question whether there were things about a building itself that sets people up to make errors. “We had a few preliminary discussions and then a learning lab, which included people from the Joint Commission on Accreditation of Healthcare Organizations, the aviation and automotive industries, and the National Patient Safety Council,” recalls **Sue McCullough**, RN, director of critical care services at St. Joseph’s.

Guiding principles for design

The safety experts told them that design definitely could have an impact on patient safety, and they recommended they come up with guiding principles for the design process. (See the box, p. 69.) “We decided

Executive Summary

Thinking ahead in the design process can help eliminate potential barriers to optimal patient safety:

- Eliminating the need to transport patients to distant departments lessens the risk of harm — for example, IV tubes being dislodged in transit.
- Nurses don’t really have to “leave” their patients to help out in adjacent units.
- Standardization of room equipment placement makes it easier for nurses from one department to work in another.

Sources

For more information on safety-related ED design, contact:

- **Sue McCullough**, RN, Director, Critical Care Services; and **Mike Murphy**, RN, Vice President, Patient Care Services, St. Joseph’s Hospital, West Bend, WI. Phone: (262) 836-8426.

that all of these elements play a role in errors,” says McCullough, explaining the selection process.

Following this process, every department manager in the hospital was given a blank board with squares for each department location, and each was asked to submit his or her department’s own design. “Of course, every department thought they belonged on the first floor,” says McCullough. The hospital has four floors.

To resolve the conflicts, the staff followed the guiding principles for design and conducted a failure modes and effects analysis (FMEA). FMEA is a methodology for analyzing potential reliability problems early in the development cycle, when it is easier to take actions to overcome such issues. “The ICU was originally on the second floor, but when we looked at the most vulnerable patients and the distances they had to travel, we decided the ICU had to be next to the ED,” says McCullough. “The FMEA took out the emotion and put in the facts: We have a tube system, so we did not need the lab near us, and we have Pyxis [medication management system], so we did not need the pharmacy near us.”

The ‘safest’ design

In the final design, the ED is adjacent to many critical departments. On the west side is the ICU, and to the north is computed tomography (CT); thus, it is just out the doors for both departments. On the east side is the mental health unit, and on the northeast side is the outpatient pre-admission area. Also to the north of the ED is the surgery department. (See the floor plan on p. 68.)

The adjacency of the ED and the ICU is “really key for a small facility,” says **Mike Murphy**, RN, vice president of patient care services. “Our core staffing in either department is not equipped to handle the potentially large patient flows we see from time to time,” he explains. “I am a former critical care nurse and managed an ED in a former life, and it would have been great back then to have an ICU right next door.”

ICU nurses do not want to leave their unit, but if they just have to walk through a set of doors, they can

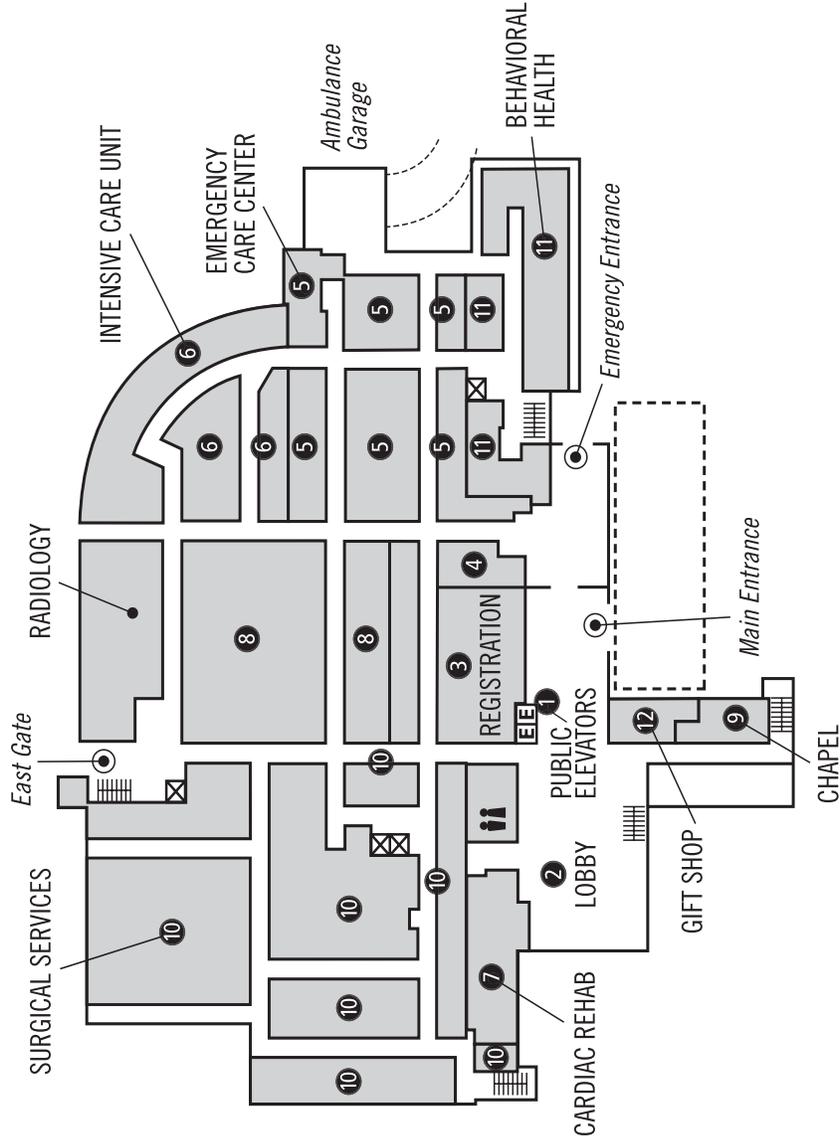
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Facility Guide

FIRST FLOOR

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- 3 Registration
- 4 Emergency Registration
- 5 Emergency Care Center
- 6 Intensive Care Unit
- 7 Cardiac Rehab
- 8 Radiology
- 9 Chapel
- 10 Surgical Services
- 11 Behavioral Health
- 12 Gift Shop

	PUBLIC ELEVATORS
	RESTROOM
	STAIRS
	SERVICE ELEVATORS



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FIRST FLOOR

1

Source: St. Joseph's Hospital, West Bend, WI.

St. Joseph's Facility Design Principles

- Visibility of patients to staff
- Standardization
- Automate where possible
- Scalability, adaptability, flexibility
- Immediate accessibility of information, close to the point of service
- Noise reduction
- Patients involved with care
- Failure modes and effects analysis (FMEA) at each stage of design
- Design for the vulnerable patient
- Human factors review
- Minimize fatigue
- Design around precarious events

Source: St. Joseph's Hospital, West Bend, WI.

be back at their bedsides in less than a minute, he says.

There is a similar skill sets in the two departments, so the managers realized they could help each other if they were not so far apart, McCullough says. They have a capacity for 14 beds, and during the day they may have only two nurses, which is not sufficient, she says. "So the ICU can come over and take a cardiac patient, or if there is a full house in the ICU and a patient needs to go to CT, they call the ED and we monitor the patient in that department for them," she says.

No fumbling for a syringe

This change has been made easier by another one of the guiding principles: standardization. All of the monitors are exactly the same in all the departments, so there is familiarity, says McCullough. "Every one of the patients' rooms has 'nurse servers' with seven drawers, and they all have the same stuff in every drawer," she says. "It's not like you have to be fumbling around for a syringe."

Murphy says designing the facility this way did not require any additional funds. Traditional design methods have lot of "mirror" designs, with common headwalls between departments, he says. "What we felt — and our builder agreed with us — was that while we would lose the economy of having common headwalls, we would pick up savings because everything was standardized and could be prefabricated off-site," he says. "Our general feeling was that it was no more expensive than a fairly traditional construction technology." ■

Patient flow initiatives slash average LOS

Rates cut from 7.5 hours to just more than 5

Three years ago, the average length of stay (LOS) for admitted ED patients was about 7.5 hours at the 17th Street campus of New Hanover Regional Medical Center in Wilmington, NC. Today, it is down to just more than five hours.

This improvement was achieved through a combination of initiatives, including the creation of a rapid admit unit and the addition of a computerized bed tracking system, says **Nancy Wooline**, director of emergency and psychiatric services for the New Hanover Regional Medical Center network, which includes the 17th Street campus and Cape Fear Hospital.

"About three years ago, we looked around our network and realized we were super-saturated and that the old tools we had in place for moving patients through the continuum of care were no longer effective," she recalls. "We felt we had done all that we could do off the back end, so we looked to shorten LOS." At that time, she notes, the network was seeing a combined total of 68,000 ED patients a year. Today, it is up to about 100,000.

By creating the rapid admit unit, the ED was "decompressed," explains **David Doolittle**, MBA, RN, manager of the unit. "We take some patients out of ED, which allows the ED staff to see more patients," he notes. The unit itself resembles a mini-ED, with small stalls, trauma beds, and easy access for the ED staff, who are about 75-100 feet away.

The unit is used, for example, when an ED physician determines a patient should be admitted to the tower (as an inpatient), but a bed isn't ready. "In the old days, that patient would have been locked up in [an ED] bed," Doolittle says. "Now, we can pull them into the nine-bed unit and do all the admission work:

Executive Summary

By combining several patient flow initiatives at once, you can generate better results, as each improvement complements the others:

- A rapid admit unit allows your staff to see a greater number of patients.
- Bed tracking system complements rapid admit unit by showing availabilities and balancing bed usage in the units.
- Bedside admission helps increase the speed at which a bed assignment can be made.

Sources

For more information on bed management strategies, contact:

- **David Doolittle**, MBA, RN, Rapid Admit Unit Manager; **David Long**, MHA, Business Manager for Nursing Administration; **Nancy Wooline**, Director of Emergency and Psychiatric Services, New Hanover Regional Medical Center, 2131 S. 17th St., Wilmington, NC 28401. Phone: (910) 815-5188.

paperwork, start IVs, drawing labs, getting the first antibiotics on board, and so forth.”

This process takes 48 minutes, he says; meanwhile, the patient’s bed is being cleaned and the room is prepared. “The key thing is that we have opened up a bed in the ED to allow an additional patient to come in,” notes Doolittle, adding that the unit sees about 75%-80% of all patients not admitted to the intensive care unit.

The unit itself is typically staffed with three nurses; three patient care technicians (PCTs), who are hybrids between unit clerks and nursing assistants; and one unit clerk. They have been cross-trained in phlebotomy, electrocardiograms (EKGs), transport, and other similar functions, Doolittle says.

There were no new full-time equivalents (FTEs) added to the nursing staff at the medical center, says Wooline. “We used parts of the FTEs from inside nursing and moved them to this unit,” she says. “For example, we had some floating admission nurses.”

A collateral benefit of the rapid admit unit is that it has been “a great morale booster” for the inpatient nursing staff, Wooline says. “When they receive a patient from the rapid admit unit, they receive what for them is really a transfer,” she explains. “There are not long hours of extensive assessments, for example.”

The bed tracking system is a natural complement to the rapid admit unit, says **David Long**, MHA, business manager for nursing administration. “There is a great deal of collaboration between David [Doolittle] and myself,” he notes.

As soon as a bed is requested from the ED, that individual is entered in the “patient wait queue,” so Long knows there is a patient in need of bed. “With that information going into a queue, you know what time the patient arrived,” he explains.

The patient placement facilitators examine the system by using Series software from San Francisco-based McKesson Corp., and look to see where available beds are in the tower on the inpatient floors and in rapid the admit unit. All of that information is displayed graphically for them, Long notes. “With a couple of flat-panel monitors, you can have a dual display, look at different icons, and see if a bed is empty, vacant, filled, being cleaned, and so forth,” he says.

This process is further facilitated by bedside admission, initiated about a year ago by moving registration staff out of the lobby. All of these factors greatly increase the speed at which a bed assignment can be made, says Long. “With more automation, David and I can look at the system and see, for example, that as soon as a patient presented to the admit area we could just send them to the rapid admit unit,” he explains. As the admission orders come together, they are processed at the bedside, Long says. “It’s really a collaborative effort to minimize wait time,” he adds. ■

In-house ‘Access Center’ relieves ED bed burden

Unit: 600 calls, 425 unscheduled admits monthly

The creation of an “Access Center” to handle inter-hospital transfer coordination and unscheduled admissions at Saint Francis Hospital in Tulsa, OK, has taken a huge load off the ED and vastly improved the movement of patients into beds.

The center, which is now about 3 years old, has handled more than 20,000 transfer calls — averaging more than 600 a month and has handled about 425 unscheduled admissions a month, according to **Darren Newkirk**, MSN, RN, CCRN, clinical manager of the center.

“That’s over 1,000 patients a month we are handling in a coordinated manner,” he says. About 54% of transfer patients are direct admits, he says. “Of course, all the unscheduled admissions should be direct,” Newkirk says. The remaining patients are ED check-ins or trauma patients at the 682-bed tertiary care facility, he says.

The center is centrally located in the hospital, with the bed assignment desk and nurses in the same room in close proximity — and about a minute’s walk from the ED. It has two nurses and bed assignment staff on the day and night shifts. On the third shift, there are

Executive Summary

A separate “Access Center,” with its own staff, can handle several tasks that might otherwise be done by ED staff, thereby freeing more of their time to treat patients.

- Direct admits are handled by the center immediately, so those patients never are seen by the ED.
- ED staff phone calls to primary care physicians to discuss unscheduled admissions are totally eliminated.
- ED manager says a significant amount of pressure is taken off her supervisors.

three nurses to provide after-hours telephone triage for 140 physicians. Most of the staffing was accomplished without adding personnel, says Newkirk.

"The nurses we brought over were already doing telephone triage," he says. "The bed assignment staff was already in admitting." He did add a single nurse on the day shift to function as bed management coordinator.

Having the center has changed processes significantly. For example, in the past, transfers were coordinated by Life Flight air ambulance dispatchers. "There were always issues that would come up concerning what was and was not a legitimate transfer, and which specialist to call for a consult," says Newkirk. "When we added the nurses, we trained them on EMTALA [Emergency Medical Treatment and Active Labor Act] and all about the transfer process." Complaints went down, coordination went up, and there was much better buy-in from physicians, he reports.

In the past, when physicians would call in unscheduled admissions, the admitting department would send them to one of five entrances, often resulting in delays in terms of getting them to the proper department. "Now all calls from doctors' offices or from homes go through the Access Center, and we coordinate the most appropriate entrance for them to come to," Newkirk explains. "We also notify the ED and tell them they are a direct admit, so they don't check them in."

This process takes a lot of pressure off supervisors, says **Jan Emmons**, MSN, RN, director of emergency services. "Someone else is making those phone calls to physicians, so we are more able focus on patient care," she says. "Plus, instead of filtering everything through our door, the Access Center handles many of the patients."

In addition, because patients go to the appropriate place more quickly, patient satisfaction is getting a boost, Emmons says. "If they need to be in the ED, they should be there, but if they are coming from another facility and the access center can make more appropriate arrangements, that's great."

Initially, the Access Center led to significant improvements in patient flow. In an article in the June 2005 issue of *Journal of Emergency Nursing*, it was reported that patient admission wait times were cut by 64% and there was a 40-minute decrease in bed assignment times for ED patients.¹

However, in what has turned out to be a familiar "good news, bad news" scenario, the center also has

led to a 9% increase in hospital admissions. As a result, "as we got more and more patients, our wait times started to go back up, and the number of patient denials because of bed availability also started creeping up," reports Newkirk.

In an effort to get on top of the situation again, Saint Francis plans to implement an automated bed board pre-admission system in July. "We are also working to bring in a dedicated admissions unit, so if there is no bed available, the patient can go there to be checked in and pulled out of the ED once we know they are going to be admitted," Newkirk says.

Regardless, Emmons is extremely happy with the Access Center. "I wasn't here when it was first opened, but the only thing I would have done differently would have been to make the move earlier," she says. "The burden taken off the ED staff has been unbelievable. I don't know *how* they did it before."

Reference

1. Hemphill R, Nole B. Relieving an overcrowded ED and increasing capacity for regional transfers: One hospital's bed management strategies. *J Emerg Nurs* 2005; 31(3):243-246. ■

Sources

For more information on bed management strategies, contact:

- **Jan Emmons**, MSN, RN, Director, Emergency Services;
- Darren Newkirk**, MSN, RN, CCRN, Clinical Manager, Access Center, Saint Francis Hospital, Tulsa, OK. Phone: (918) 494-2200.

CE/CME questions

13. According to David Vukich, MD, the annual costs of an in-house HIV testing program in an ED would be about:
 - A. \$200,000-\$300,000.
 - B. \$250,000-\$350,000.
 - C. \$300,000-\$400,000.
 - D. \$350,000-\$450,000.
14. According to Jennifer Cordia, RN, BSN, using a fingerprint scanner to log on to the department's computers has the following advantage:
 - A. Heightened security for medical records.

COMING IN FUTURE MONTHS

■ Patient disappears after triage: Can you bill for ED service?

■ Do top-performing EDs have lower percentage of complex cases?

■ EDs collaborate to reduce treatment times for MI patients

■ Will proposed EMTALA guidelines ease transfer burdens for EDs?

- B. A more rapid sign-on process.
 C. Better log-in, log-out compliance.
 D. All of the above
15. According to Chris Martin, RN, BSN, while the area EDs no longer can go on diversion, they still can declare "ED saturation" for a maximum of:
 A. Six hours for each 24-hour periods.
 B. Five hours for each 24-hour period.
 C. Four hours for each 24-hour period.
 D. Three hours for each 24-hour period.
16. According to Sue McCullough, RN, the ED and the intensive care unit (ICU) are located adjacent to each other because:
 A. It helps avoid patient harm from long transports.
 B. ICU nurses feel more comfortable about leaving their patients to check on someone in the ED.
 C. ED and ICU nurses have similar skill sets and can help out in each others' departments.
 D. All of the above
17. According to Nancy Wooline, her facility was able to cut average length of stay from 7.5 hours to five hours by combining the following initiatives:
 A. Bedside registration, computerized bed tracking, and physician at triage.
 B. A rapid admit unit, computerized bed tracking, and bedside registration.
 C. Five-tiered triage, a rapid admit unit, and computerized bed tracking.
 D. A rapid admit unit, protocols giving nurses greater ordering responsibilities, and bedside registration.
18. According to Darren Newkirk, MSN, RN, CCRN, the reduction in patient wait times made possible by the center could not be maintained because:
 A. The staffing was inadequate.
 B. Admissions increased 9%.
 C. The hospital could no longer fund the center.
 D. Primary care providers were not cooperating.

Answers: 13. C; 14. D; 15. A; 16. D; 17. B; 18. B.

CE/CME instructions

Physicians and nurses participate in this CE/CME program by reading the issue, using the references for research, and studying the questions. Participants should select what they believe to be the correct answers, then refer to the answer key to test their knowledge. To clarify confusion on any questions answered incorrectly, consult the source material. After completing the semester's activity, you must complete the evaluation form provided and return it in the reply envelope to receive a certificate of completion. When your evaluation is received, a certificate will be mailed to you. ■

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1. **Apply** new information about various approaches to ED management.
2. **Explain** how regulatory developments apply to the ED setting.
3. **Implement** managerial procedures suggested by your peers in the publication. ■