Running a hospital is always a case of extreme multitasking. You have to simultaneously provide top flight medical care 24/7, meet ever-increasing patient demands, work to recruit and retain professional staff, follow intricate regulatory and legal requirements, keep up with a knowledge and technology base that changes faster than practically any other business, plus deal with the pressures of competition, cost containment, and third party oversight of everything you do.

The Emergency Department (ED) puts an exclamation point on those challenges. Unpredictable, intense, sometimes chaotic, EDs are unique workplaces. It requires careful planning for an ED to operate at the highest level. When it was time to expand and improve the ED at Silver Cross Hospital, a 300-bed acute care facility in Joliet, IL, an hour south of Chicago, the administration turned to a team of healthcare experts, including Silver Cross staff, independent architects and designers, and Nurture by Steelcase, to develop a premier ED.
HISTORY AND SYMPTOMS

Silver Cross is an impressive healthcare provider with 1,800 employees and over 400 physicians. Their level of patient care and performance has earned a 100 Top Hospital ranking for two consecutive years from Solucient, a national hospital benchmarking organization.

By 2005, the fifteen-year-old ED had become outdated, says Geoff Tryon, Silver Cross vice president responsible for the ED. Built to care for 25,000 patients a year, it was handling 44,000. Patient ED volume was growing 10% a year. Staff struggled with space and work process constraints. The speed of technological change was outpacing the facility’s ability to respond to the change.

“In 1990 we had two computers and the desk clerk used them,” Tryon says. “We didn’t have electronic charting, electronic dispensing of medications and supplies, wireless technology. All of those things came later. They didn’t fit. It was cramped, the systems were outdated. We had built-in furniture that we couldn’t change.”

The ED is vital to a hospital’s health. At Silver Cross, 22% of all ED patients are admitted to the hospital. Every day nearly 500 people come through the Silver Cross ED: patients, family, friends, visitors, volunteers, outside medical professionals, people from every walk of life. Everyone who visits the department makes a value judgment about the entire hospital based on their ED experience. In many ways it’s the “front door” of the hospital.

The symptoms of the ED at Silver Cross are typical of hospitals across North America studied by Nurture. Research shows that in most hospitals:

- Patient acuity is higher than ever before
- Nurse stations in patient care areas do not adequately support how the staff actually works
- New regulations, such as HIPAA (Health Insurance Portability and Accountability Act) place increasing demands on staff and facilities
- National shortages of physicians, nurses, and other professionals make it harder to attract and retain these essential caregivers
Reducing medical errors is a constant concern and made more difficult by inadequate work space within patient care units.

“As a facility in terms of wear and tear, the ED takes the majority of the day-to-day use, while having the least amount of time to be maintained,” says Angela Byrd, a senior interior designer at FreemanWhite, an architecture and design firm specializing in healthcare facilities and part of the project team. “They’re open 24/7, and there’s no time to shut down and complete maintenance work, like a typical facility. So there’s additional pressure on the furniture and interiors for performance and durability.”

DIAGNOSIS

Plans called for doubling the size of the emergency department. To ensure the new ED could continue to adapt to changes in treatment, technology and staff needs, the department’s workspace had to be flexible. “It’s a constantly changing environment,” says Tryon. “The furniture has to last, but it also has to be able to change fast. We have to be able to rewire, reconfigure, add new technology, adapt to future changes.”

The new ED had to better support staff work with more work surfaces, a variety of places for staff to work in small groups, furniture that would support diverse work processes, and spaces for privacy in an often hectic open environment.

The ED had to welcome and support patients and partners in care with a more functional and comfortable environment, and help Silver Cross compete in the increasingly competitive market in suburban Chicago.

Silver Cross took advantage of one of the key design strategies Nurture research has identified for nurse stations, the need to support three levels of interaction:

- Unplanned, short collaboration, such as a quick discussion, or writing in a chart at a stand-up worksurface (“curbside”)
- Brief interactions, perhaps to closely review a chart or consult with another staff member (“step-in”)
- Longer term, immersive work, such as consultations, family meetings, reviewing information on-screen, etc. (“immersion”)

To help reduce the stress of waiting, the main ED entry and waiting area was planned to include semi-private spaces, diversions for families and visitors, spaces where the staff could deliver important patient news, as well as the means for visitors to connect with the outside world.

TREATMENT

“We focused on patient care, service, being able to access the tools we needed and the other departments – lab, radiology, supply departments– so we can provide great care and reduce the amount of time the patient has to spend here,” says Tryon.
The new ED includes 26 private treatment rooms, 6 dedicated observation beds, and expanded diagnostic facilities. Furniture, technology, and space are integrated to improve work flow:

- Plenty of writing surfaces at seated and standing height for short-term and multitasking work
- Interior workstations with high walls for concentrated work, nurse’s report, and other meetings
- Spaces for small group consultations and in-services
- High performance seating that comforts and supports hospital staff

Montage® systems furniture, with a 3” thick panel and huge cable capacity, was used for all five nurse stations. “Montage gave us all the flexibility we needed,” says Byrd. “We ran critical power (circuits backed up by generators in the event of a power outage) and regular power in the nurses stations, and that’s not something every system can do. That was important.”

“The ED interiors are going to take a beating,” says Bill Scholl, sales vice president at OEC Business Interiors, Elmhurst, IL, “and Montage will hold up over time. Even if tiles get dirty or damaged, they’re easy to replace with very little or no down time.”

The tiles on the Montage nurse stations match the cherry finish on doors, an elegant, warm touch in an emergency care facility. “Everything is solid steel, reinforced, so it doesn’t break,” says Tryon. “It sure doesn’t scratch like some other furniture.”

Each nurse station includes deep worksurfaces and Details® Slatwall, monitor arms, and work tools to provide more staff work area. Criterion® seating adjusts easily for different users and gives long-term ergonomic support.

In the main waiting area there are separate gathering spaces for patients and partners in care. A children’s play area includes a 200-gallon aquarium and video game system. Migrations® chairs form small group seating areas and matching tables offer outlets for power and internet access. The Silver Cross ED ‘front door’ features organic patterns, colors and shapes, wood and glass tiles a welcoming, functional space for everyone who enters the ED. “This gives them a whole new image,” says Byrd.
Half of the new ED opened in June, 2006. When the second half opens in January, 2007, the complete 30,000 sq. ft. department will provide the room to care for over 60,000 ED patients annually.

“We can better address our volume,” says Tryon. “It’s a much nicer place for everyone involved – patients, staff, and physicians. The layout, the equipment, the furniture, everything works together and flows well.”

The ED staff has the space to do their jobs now. The different worksurfaces and spaces are not only easy to get in and out of, there’s plenty of room for people to chart, even when there’s ten people on duty. There’s close proximity to the patients, but also between the doctors, nurses and clerks, and easy access to the medication area, nutrition area, and supplies.

Silver Cross reengineered and improved their work processes to better treat patients while decreasing their time spent at the hospital. ED turnaround time from when a patient enters the ER to the time he goes home or is admitted to the hospital, is far below both the Chicago area and national benchmarks.

“We wanted to create a premier ED and the furniture is part of that. It gets hard use, spills, heavy traffic. You need to look good every time. You can’t buy furniture every few months. It’s got to perform, to last, and look good, and that’s why we selected Montage, and why we selected Nurture by Steelcase.”

TEAM
FreemanWhite, Charlotte, NC
OEC Business Interiors, Inc., Chicago, IL

STEELCASE PRODUCTS
- Montage, Elective Elements®, Series 9000® systems furniture
- Criterion, Leap®, Gentry®, Migrations and Rave seating
- Universal storage
- Convene® conference tables
- Sieste™ lounge seating