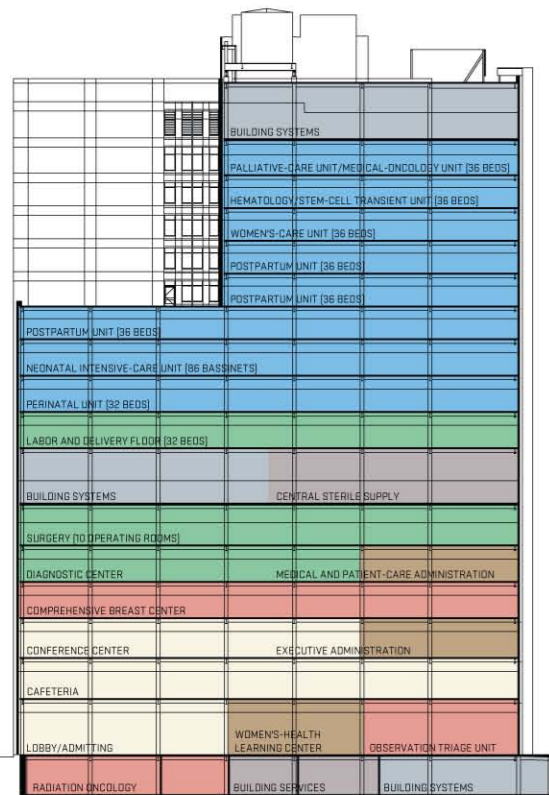


by
**Julie
Taraska**

AMENITY HOSPITAL



A building section (left) shows the distribution of hospital facilities over 17 stories. The patient-care units (in blue) are concentrated on eight upper floors. Patient rooms line the glass facade, providing ample daylight and views of the surrounding campus and nearby Lake Michigan.



The spacious main lobby (above) was designed to be a warm, welcoming area, filled with light from floor-to-ceiling windows.

Prentice Women's Hospital (left), a 947,000-square-foot facility in downtown Chicago, acts as a gateway to Northwestern's medical center.



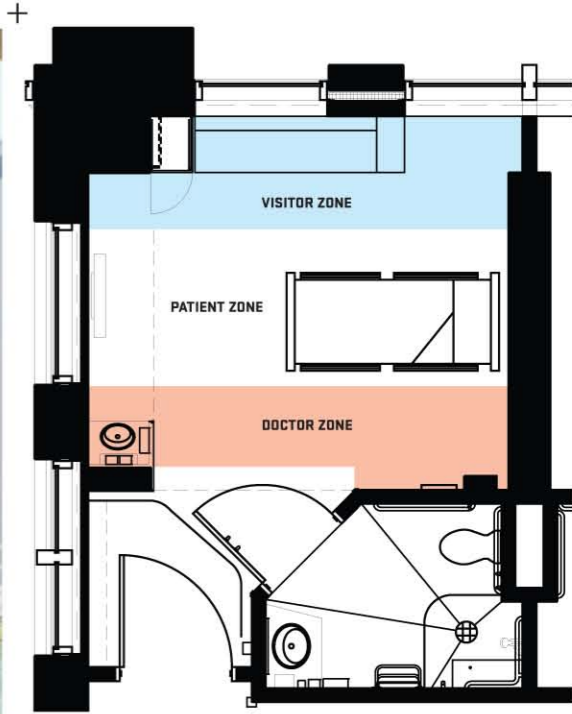
WALL-COVERING
Although it looks like wood, the wall-covering is actually a durable, easy-to-clean plastic laminate.

MEDICAL EQUIPMENT
Equipment that might make patients nervous is affixed to the wall above the bed, out of their sight.

ROOF GARDEN
Prentice has three roof gardens; together they form 9,500 square feet of green space.

SEATING
The six-foot-long bench folds out into a comfortable bed for family members staying overnight. The green chair to the left is a "glider," which is very supportive for breast-feeding.

BABY CRIB
A custom-made crib is at an ideal height for standing caregivers—while still being visible from tall hospital beds. Wheels allow it to be moved around the room or to the nursery.



POSTPARTUM PATIENT ROOM



A new women's health-care facility draws on lessons learned from the hospitality industry.

A hospital stay is a profoundly stressful experience. You arrive already in discomfort only to be subjected to a litany of indignities: you're poked and prodded, reduced to wearing a flimsy gown, and dependent on strangers for information, food, and help going to the bathroom. The typical surroundings only exacerbate the situation. Just when you need home comforts the most—perhaps a quiet sunny space, some soft cotton sheets—you're thrust into a dreary cinder-block room, set under the glare of fluorescent lights, and left writhing on a sea of antibacterial fabrics and hard plastic surfaces with an endless sound track of disembodied voices emanating from an intercom by your head. Is that any way to convalesce?

TV photo: Jeff Millies/Heidrich Blessing; other photos: Craig Dugan/Heidrich Blessing; other images, courtesy VOA and OWP/P

The architects behind Prentice Women's Hospital, a new 17-story, \$550 million academic medical facility in downtown Chicago, have a different idea. The latest addition to Northwestern Memorial Hospital's medical campus is designed by local firms OWP/P and VOA, and incorporates some of the latest trends in health-care design. To tend to patients of all ages and stages of health, the team drew upon lessons from the hospitality field and experience-based design, while greening the project and incorporating the latest communication technologies.

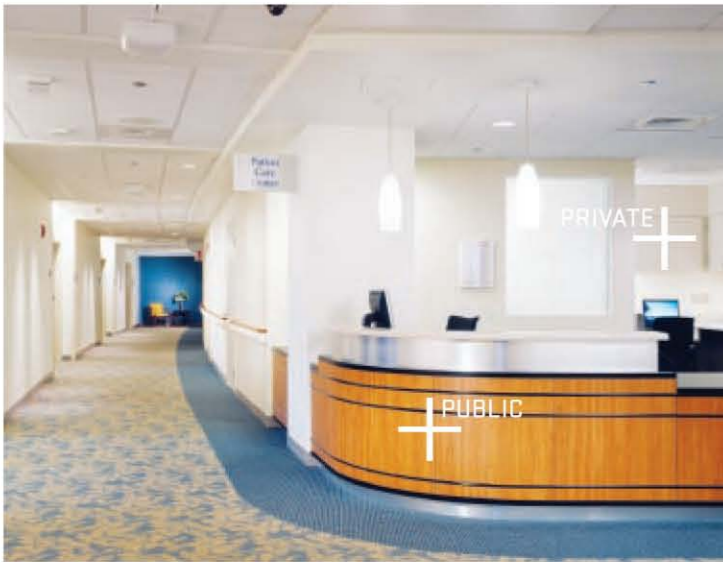
"We had the almost unheard-of opportunity for an urban hospital of saying, 'If you had a clean slate, how would you design this building?'" Betsy Finkelmeier, Prentice's director of women's health, says of the nine-year effort that yielded a maternity center able to support up to 13,600 births a year, a neonatal intensive-care unit, a breast-health center, facilities for oncology and hematology treatment, and operating rooms for breast and plastic surgery.

Alicia Murasaki, a senior project manager for Northwestern Memorial's campus development, walks through Prentice's street-level lobby, where winter sunlight is streaming through the double-height



Hotel-style amenities include 42-inch flat-screen televisions (above), which can be used to access the Internet, patient-education materials, and even room-service menus. Above right: All of the overnight rooms have bathrooms with hair dryers.

"We had the almost unheard-of opportunity for an urban hospital of saying, 'If you had a clean slate, how would you design this building?'" says Betsy Finkelmeier, Prentice's director of women's health.



There are two Patient Care Centers (left) per floor, each of which serves 16 to 18 beds. At the front of each center is a public zone accessible to patients; a private work area for the nurses is in the rear.

"Certainly we didn't want people to feel like they were going on a vacation, but why couldn't they feel comfortable and not have the first thing on their mind be: 'I'm here because I'm sick'?" Alicia Murasaki says.

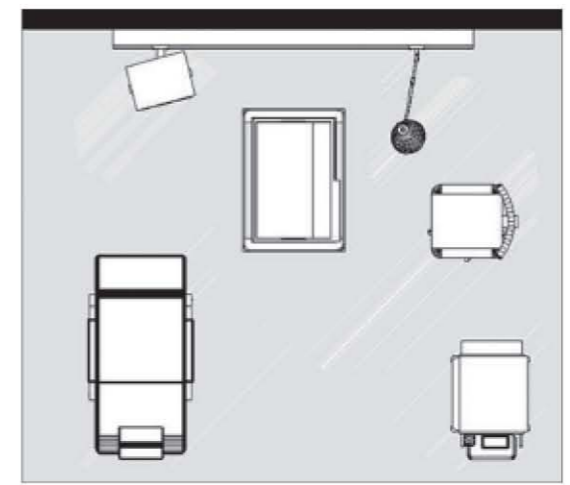
windows on three sides. "In this area we were trying to be very welcoming, to be the front door of this building and the campus," says Murasaki, an architect who served as the liaison between the hospital's designers and staff. She points out the curving cherry-wood wall on the left, which adds a warm residential touch to the yawning space, and a seating area to the right, where moss-green upholstered armchairs are arranged in small groups. Rather than loudspeaker announcements, the dominant sounds are footsteps on the white marble floor and the gurgling of a cappuccino machine, coming from the Argo Tea kiosk just ahead.

"We started looking at different types of places, like living rooms and hotel lobbies," Murasaki says. "Certainly we didn't want people to feel like they were going on a vacation, but why couldn't they feel comfortable and not have the first thing on their mind be: 'I'm here because I'm sick?'"

Comfort is a difficult concept to integrate into a hospital. Part of the challenge is balancing the building's often conflicting program elements. Aside from basic issues like circulation, you need to address problems as varied as security, infection control, efficiency, privacy, and even compassion for a patient's feelings. OWP/P's Chris Liakakos handled this broad-stroke organization at Prentice. Working with user groups from the hospital and VOA's Rebel Roberts, who oversaw the building's interior and exterior design, Liakakos created separate elevator banks for staff, patients, and materials.

He located the lobby, cafeteria, and conference center—the facility's busiest areas—on the first three floors, allowing visitors to enter and exit quickly. Dividing each section into a front of house with public corridors and a back of house with protected patient and staff areas, he choreographed the building's flows, ensuring that incoming and outgoing populations crossed paths only at specific times. In addition to vertical movement, he also anticipated horizontal

NEONATAL INTENSIVE CARE UNIT



Above: A floor plan for a room in the Neonatal Intensive Care Unit. Right: Patient rooms (in dark blue) on Prentice's 10th-floor NICU.



NURSE WORKSTATION
Each room in the NICU has a wall-mounted computer so that nurses and caregivers can call up patient charts only steps from the bedside.

PRIVACY SCREEN
Sliding glass dividers partition the NICU into private cubicles.

BEDSIDE COMFORT
Since parents often stay at the bedside for long shifts, the NICU has comfortable recliners on wheels. The shelving unit behind the chair has a breast pump and storage space.

PADDED FLOOR
Cushioning under the wood-toned vinyl flooring helps absorb sound and is more forgiving for NICU nurses, who sometimes work 12-hour shifts.



Above: A labor-and-delivery stretcher inside a prep-hold-recovery room on the eighth floor

Below: One of two overnight rooms for the families of NICU patients with a fold-out couch and views of Lake Michigan

NICU FAMILY OVERNIGHT



THE SOUND OF SILENCE
With Vocera, patients can have direct contact with their caregivers rather than going through a reception desk. By curbing phone calls and overhead paging, Vocera keeps overall noise levels down.



Opposite page: sound-system photo, courtesy Vocera; floor plans, courtesy VOA and OWP/P; top left photo, Craig Dugan/Hedrich Blessing; center photo, Nick Merrick/Hedrich Blessing. This page: Jeff Millies/Hedrich Blessing

connections: planned tunnels and second-floor bridges to the nearby Feinberg and Galtter Pavilions—which house the main medical facilities—and the Children's Memorial Hospital, slated for completion in 2012.

With the building's stacking and blocking set, Roberts began devising ways to weave in greenery and daylight, both found to speed recovery times. "We talked about nature, about views of the sky and the park, and of Lake Michigan, just down from us," he says. To that end he made the facade as transparent as possible, curving its east-facing wall to maximize views and light, and opting for thin precast concrete ascendants. To the building's top and 11th floors he added a total of 9,500 square feet of roof gardens, allowing patients from those levels up to see greenery year-round.

For the hospital's interior, Roberts specified low-VOC finishes and adhesives to improve indoor air quality, and selected everything from LED lights for promoting energy efficiency to high-recycled-content rugs. (The efforts are substantial enough that Prentice is applying for LEED certification.) Aside from being, according to Roberts, "the right thing to do," the environmental moves also had economic advantages. "In Chicago, if your project is green, you go to an accelerated approval for city permits," he says. "It's expedited, big time. It can go from three or four months to three weeks. So it's a huge incentive."

The overnight rooms have a distinct residential feel. "We tried to think about how the staff, the patients, and the families wanted to use them," says Murasaki of the 292-square-foot quarters, which are decorated in soft blues and

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continued from page 93 feature wood-toned walls and flooring. Each room is divided into three zones. At the point of entry is the staff area, where caregivers can wash their hands, use the bedside computer to call up a patient's medical records, and even empty the trash can without going over and around the bed. In the center is the patient zone, which in the maternity ward includes a baby pod at the bed's foot. At the far side, by the window with views of Lake Michigan or Chicago's downtown, is the visitors' area, stocked with a side chair with arms and a six-foot-long window seat that folds out into a comfortable overnight bed. The multilevel lighting, including a dimmable main unit, a bedside lamp, and task and examination lights for the caregiver, takes cues from hotel and residential design; the elements reinforce the zones while minimizing what Murasaki calls the "high noon at the flip of a switch" effect.

The building's form is a testament to the broad-mindedness of the architects; as men, they were driving blind.

All of the room's potentially unnerving medical equipment is affixed to the headboard, out of a patient's sight. Instead, the focal point is a 42-inch flat-screen TV that provides access to entertainment, the Internet, health education, and the hospital's various amenities, including its room-service menu. The latter was a means by which Prentice tailored itself to the 24/7 nature of childbirth. "If you get to your postpartum room at 3 a.m. and decide you're ready for an omelet, you can pick up the phone, and within an hour you'll have one," Finkelmeier says.

Room service underscores the marketing lessons learned from the hospitality field. "What they do really well is listen to their consumers," Murasaki says. "You can see a hotel that caters to luxury travelers has a different feel and amenities than one catering to a family crowd. At Prentice we wanted to take that to the next step." This is part of health care's shift to "patient-centered" care, a move driven largely by economics: many people today are willing to travel great distances to obtain the best medical care, so hospitals must compete for their business.

Little surprise then that substantial consideration was given to another space important to women: the bathroom. To make them more attractive and functional, the team added high-grade finishes, a hair dryer, and flattering lighting. "After you have a child, everyone descends upon you, and you usually don't look very good," Murasaki says. "If you didn't pack your overnight bag correctly—and this happens all the time—or if you didn't bring your cosmetics or hair dryer, what kind of things could we put into the room to make you feel personally more at ease?"

In Prentice's Neonatal Intensive Care Unit (NICU), a baby's average stay is 14 days, so supporting the parents is nearly as critical as treating the newborns. The attention begins with the calming atmosphere inside the unit: a sound-absorbing wood-look vinyl floor cushions footsteps and keeps noise to a minimum. Ambient overhead lighting, glare-free finishes, and colorful pictures and wall hangings—part of the 1,100 artworks hung through the hospital—soothe frayed nerves, downplaying the seriousness of the situation.

NICU babies reside in pods in cubicles, six or twelve to a ward. Each cubicle has telescoping glass dividers along its sides and **continued on page 108**

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continued from previous page a retractable curtain at the front, allowing family privacy during visits. All cubicles come with such amenities as a breast pump to encourage bonding between mother and child, a recliner, and a cabinet that can be personalized with photos.

Surprisingly, the NICU's most family-friendly feature has been Vocera, a two-way hands-free communication device that unit nurses wear on lanyards around their necks. The wireless gadget automatically notifies staff about any change in their charges' conditions, keeping them informed even if they're not cribside or at the nurses' station; visiting parents can use the device to have instant direct contact with their child's caregiver rather than going through a reception desk.

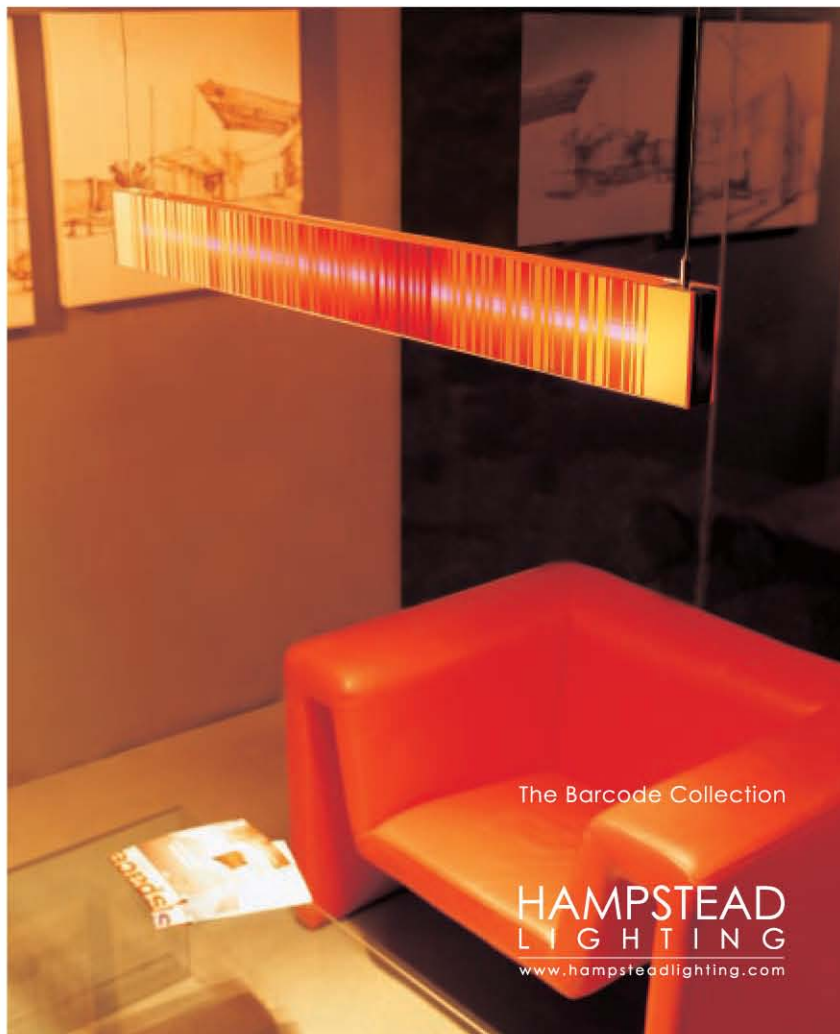
Vocera keeps the NICU's noise levels down. In fact, acoustics are the next frontier in hospital design.

The technology has benefited both parties. "It used to be that when a family visited we would need to hold their hand, reassuring them that everything's OK, we're just over there, and here's the call button to push if you need us," says Kristy Kalinsky, a NICU manager. "Now they come in and say, 'Wow, that's great. We'll see you later,' and close the curtain so they can be alone with their baby." She laughs. "The change in behavior has shocked our staff, but we're thrilled. The technology has let the family's independence really shine."

Vocera also keeps the NICU's noise levels down, removing that stress from the babies, the parents, and the unit. Acoustics are, in fact, the next frontier in hospital design. "For so long it was about daylight and views—we all understand that now, and we're all doing it," says Lynn Befu, director of interior architecture at Anshen + Allen, a San Francisco-based firm specializing in health-care projects. "But going forward, the thing will be to provide a quiet environment so patients can sleep. Sleep is nature's healer. And it's a free resource."

To refine this hospital dedicated to serving the health needs of women, the designers benefited from an inordinate amount of female input. More than 125 groups were polled about everything from the scale of the labor-and-delivery room to the lobby's color palette; the opinions came from such parties as caregivers and the information-technology team to mothers-to-be and the hospital's doorman. The building's final form is a testament to the broad-mindedness of Liakakos and Roberts; as men, they were in some aspects driving blind, forced to rely more than usual on the intuition of others. "I wouldn't say it was hard," Roberts says, "but more that Chris and I were cautious and suspicious of ourselves."

And yet it would be wrong to assign Prentice a gender. Its look may have been informed by female preferences, and its layout and amenities tailored to women's physical and psychological needs, but its appeal is universal. What patient wouldn't want more natural light in his room? What wife wouldn't want a soft place to lay by her husband's bedside? What parents wouldn't want more private time with their ill child? "Before we began Prentice, we had long discussions about feminine and masculine architecture but couldn't come to a conclusion," Murasaki says. "What we ended up thinking is, when you come into a building it should make you feel good, whether you're a man or a woman." www.metropolismag.com



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