

ts for Healing

Designing a Patient-Focused Care Center

BY KATE JACKSON

For decades, research has repeatedly confirmed a fact that architects know intuitively: People are profoundly influenced by their physical environments. Studies demonstrate, for example, that people in spaces without natural light do not heal as quickly as those in rooms with daylight. Similarly, individuals respond poorly to visual chaos and blandness, but react positively to certain types of visual stimulation. Soothing sounds and pleasing colors help relieve stress and promote comfort, while jarring or unpleasant noises induce stress, and certain colors may arouse tension and elicit stressful associations.

Despite knowing that a calming, comforting environment enhances healing, hospitals and other medical facilities typically have been designed—unwittingly—in a manner that increases patient anxiety and discomfort. Most often, the design, layout, and decoration of medical facilities have been based upon the needs and convenience of the staff and driven by expediency. Patients' interests have often been left out of the design process—an omission that leads to demoralization, particularly in cancer patients.

Bringing the Patient to the Table

When Memorial Sloan-Kettering Cancer Center (MSKCC) administrators planned a new suburban freestanding ambulatory care center in Westchester County, N.Y., they sought to break from this counterintuitive tradition and apply the fruits of research to create an atmosphere conducive to patient comfort. In the mid-1990s, MSKCC decided to expand its services to treat many of its patients closer to their homes in counties surrounding Manhattan. It began by establishing outpatient facilities in conjunction with community hospitals at which its doctors and therapists could treat patients who previously had to travel regularly to receive chemotherapy or radiation therapy.

The successful expansion into Westchester County, inspired MSKCC to commission a free-standing ambulatory care center on Long Island, 50 miles east of New York City, to provide comprehensive outpatient cancer care services. MSKCC's forward-thinking hospital administrators recognized that providing remote, stand-alone outpatient services would allow them to tailor services to the particular needs of suburban patients. Beginning from scratch on an 11-acre, wooded, green field would allow them to create a new kind of environment that research strongly suggested could enhance the treatment atmosphere. To achieve this vision, they commissioned Ewing Cole Cherry Brott, a Philadelphia, Pa., architectural firm with experience designing cancer facilities and a deep interest in creating patient-focused environments conducive to healing.

The chemotherapy infusion room allows

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The Architecture of Emotion

"Architecture has been making people feel good about themselves for thousands of years," says architect Andrew Jarvis, AIA, CEO, a partner at Ewing Cole Cherry Brott and project manager for the MSKCC endeavor. "Architectural history," he insists, "is filled with examples of buildings that people want to be in because the buildings make them feel good."

MSKCC wanted their new outpatient facility to incorporate the best aspects of hospital care and provide patients with a welcoming and nonstressful environment. Jarvis says that MSKCC closely examined the origins of radiation therapy practices and how they're performed, realizing that some of these practices could be performed differently in an outpatient setting to increase patient comfort and promote healing. "MSKCC recognized that there is therapeutic value to be gained by designing a facility that puts patients in a frame of mind to be healed." This, he says, is exciting to architects.

According to Jarvis, MSKCC resolved that every design decision about the center would put patients' preferences first. Combining both their expertise, MSKCC and Ewing Cole would construct a facility conducive to optimal patient care.

MSKCC had the benefit of patient satisfaction studies conducted at its other outpatient facilities, according to Jarvis. "It learned patients' preferences, and these factors were folded together into the thinking for the new building."



(top) The library serves as a waiting area for family members, a patient resource center, a seminar space for conferences, and a community education room. (above) A 12-foot-long aquarium in the two-story, sky-lit lobby is a central feature for wayfinding, and its tropical fish help draw patients' thoughts away from their illnesses.

This isn't to say that staff concerns were omitted, but merely that patients came first. "We would take the planning and designing to a certain level to establish some of the major features that were important to patients," says Jarvis. "For example, the idea that as radiation therapy patients entered the outside of the linear accelerator vaults from the dressing room, there would be a window overlooking a garden. Before showing it to any of the doctors, we established that there was going to be a window on nature, rather than a doctor's office, exam room, or toilet room in that valuable space." It's important, Jarvis explains, that patients see something natural at a moment of stress. The new building's

design also required turning control desks around so that radiation therapists' backs were not facing the patients who emerged from the dressing rooms.

After patient-focused decisions were made, staff members offered input on issues affecting them, such as where to place computers, how many outlets are required, how much cabinetry is necessary, and more.

The result of scrutinizing patient satisfaction and creating a new patient-focused model of ambulatory cancer care delivery is the Ambulatory Cancer Care Center in Commack, N.Y., a 50,000-square foot facility that takes radiation therapy out of its traditional basement location and brings it into the light. The center is designed not only to bring in

natural light wherever possible, but to open out onto views of nature. Exam rooms, waiting areas, and consultation rooms are located around the building's perimeter to bring them closer to light and nature.

The center is divided through layout, light, color, and decorative schemes into public, intimate, and treatment zones that respect patients' varying needs and emotional states. "The flow for the patients—whether they're checking in, passing through the clinic, going in and out of changing rooms and to treatment machines—has been well thought out, not only to reduce patient apprehension, but to help the staff coordinate their care," says Daphna Gelblum, MD, service chief, radiation oncology.

Shielding the Patient From Stress

All efforts were made not only to provide pleasant and calming signs and sounds, but, perhaps more important, to decrease unpleasant sights and sounds. To ease patients' fears, a chief design rule was that no medical devices or equipment would be visible in public areas. Even in treatment areas, the designers and administrators were sensitive to the effect equipment may have upon patients. Though radiation therapy is mostly a painless procedure, patients still associate it with anxiety, and the tools of the trade can be distressing. It's crucial, according to Jarvis and MSKCC administrators, to screen therapy equipment, which can be intimidating to patients who are not familiar with it. The equipment is necessary, Jarvis notes, but its effects can be minimized. "It's important for a provider to recognize that there are ways to screen, conceal, and disguise objectionable and disturbing artifacts of the trade in ways that do not encumber the process of delivering therapy."

As in their other facilities, a traditional overhead paging system was eliminated in the new MSKCC ambulatory care center in favor of a personal one. "The overhead system can be intrusive during a one-on-one conversation with a patient," explains MSKCC chief therapist Raymond Herrick. "Especially when a sensitive topic is being discussed, it's not a good idea to have a booming voice come over the loudspeaker." Instead, MSKCC staff members all wear pagers, can get text messages sent to them from any terminal in the building, and can pick up a phone anywhere in the building and access a call or talk to the person who paged them. "It's something that's thought of from a patient perspective, but it also makes a nicer working environment for the staff. When you don't need an ear open for your name being paged while sitting with someone, you can focus on the patient," says Herrick.

Returning Control and Privacy

Another design imperative was to ensure that, whenever possible, patients control aspects of their environment. Studies demon-

strate that when people are put in situations in which they cannot control their surroundings, their stress levels increase. "If a patient can't adjust the light switch, control the blinds, or adjust the thermostat, it creates a level of stress," says Jarvis, who notes that this lack of control can interfere with an individual's ability to heal. Healthcare facilities typically ignore this need, and it's particularly unfortunate in settings such as those for radiation therapy where patients are likely to return repeatedly. "Patients are often trapped while they're waiting to see a physician or therapist, and they have no choice of where to sit and what to look at." In this way, says Jarvis, "healthcare facilities create stressful environments at a time when people can least tolerate them." As a result, Ewing Cole designed the facility to give patients choices, whether that is selecting a seat, what to watch, or what to do while waiting.

In the new ambulatory care center, as in all MSKCC centers, great pains were taken to protect patient privacy—an often overlooked issue that's a frequent source of patient distress. Says Herrick, "A door leading from the changing area goes right to the treatment machine, so patients aren't walking around the department in a gown."

Improving the Odds

"What makes this building different," says Gelblum, "is its warmth and the welcoming feeling patients get when entering. They don't feel that they're entering a medical facility," she observes, "so it doesn't further depress and condemn them with the diagnosis they're walking in the door with."

The patients' experience validates MSKCC's commitment to the patient-focused approach and Ewing Cole's creative and sensitive design. One patient was heard saying that while she's at the center, she doesn't feel like she has cancer: "I know I have cancer, but somehow I feel better about myself, my disease, and my future." Jarvis doesn't underestimate the power of architecture. "I want these buildings to be places where people feel a sense of encouragement and optimism about their health because when they feel uplifted by a building, they have a better chance of getting well faster."

In the case of MSKCC's Ambulatory Cancer Care Center in Commack, serendipity played a role as well. One goal of Jarvis' design was to let light shine in, which a skylight 30 feet above the lobby floor allows. In what he terms "a complete fortunate accident," when that sun streams in, a rainbow graces the lobby, as if nature approves. "Some of the glass inside refracts the light and creates spectrums across the lobby," Jarvis explains. "We're trying to learn how to do that for real next time."



— Kate Jackson is a staff writer at **Radiology Today**.

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