

Building a Healing Environment

by Catherine Fredman



Robert Ulrich's epiphany began with a badly broken leg. Forced to lie flat on his back in his hospital bed, Ulrich, an environmental psychologist, stared for hours at the glaring ceiling light and a ventilator whose closely spaced slats wavered dizzily as a result of his pain medication. "I remember how distinctly unpleasant it was to have no choice but to look at that or the acoustic tile, and how much I wished I had an attractive image on the ceiling," Ulrich recalls. Now the director of the Center for Health Systems & Design at Texas A&M University, Ulrich produced ground-breaking research showing that the environment in which healthcare is delivered directly affects the quality of care.



Catherine Fredman writes about personal finance, management strategy and adventure travel. She's especially proud of co-authoring best-selling business books with Intel Chairman Andy Grove and Dell Computer CEO Michael Dell, as well as surviving survival school in southwest Utah, where the native New Yorker learned to catch fish with her bare hands and build a fire without matches.

Building a Healing Environment, continued

Along the way, his studies spearheaded a movement that is changing the nature of healthcare delivery in the United States. Today, more than half a dozen institutions, including the non-profit Center for Health Design and the American Institute of Architects Academy of Architecture for Health, are researching the effects of user-centered design. And a growing body of scientific evidence increasingly proves that emotionally supportive interior design is a key component of better and safer healthcare.

It's a well-documented fact that most hospital patients experience considerable stress. From a psychological standpoint, stress can be manifested in feelings of helplessness or depression. Physiologically, stress can cause increased blood pressure, muscle tension and high levels of circulating stress hormones. The negative mind-body connection delivers a one-two punch that saps a patient's ability to get better faster.

Conversely, thinking well promotes feeling well. The key is to find the triggers that help the mind and body connect in a positive fashion. Design offers especially efficacious solutions. "Colors, textures, architecture, signage and artwork telegraph the message that the

environment is not only competent but also caring," comments Christopher Naughton, an associate specializing in healthcare planning and architecture at the Detroit-based SmithGroup.

The story that proponents of user-centered design want to tell is one of a nurturing environment that offers emotional support and, above all, stresses relief. It's a story composed of five components:

Don't fool with Mother Nature.

In 1984, Ulrich published a groundbreaking study in the prestigious journal *Science* showing that surgery patients in rooms with an outdoor view suffered fewer complications, used less pain medication and recovered more quickly than those with a view of a brick wall. Since then, other research has found benefits of all sorts of connections to the natural world: aquariums, gardens and water elements such as pools and waterfalls—"anything but the hard, institutional aesthetics of the traditional healthcare building," says Ulrich. Urban medical centers can also tune into the natural world. The Mayo Clinic's new 20-story Gonda building in downtown Rochester, Minnesota, has a three-story wall of glass to stream maximum natural light into the lobby and patient waiting areas.

Emotionally
supportive
interior
design is a
key
component of
better and
safer
healthcare.



Building a Healing Environment, continued

Take control. “One of the biggest aspects of a non-healing environment is the lack of control,” says Ulrich. One size rarely fits all when it comes to lighting or room temperature. Being unable to control your environment can result in depression, passivity, elevated blood pressure and reduced immune function.

Lack of privacy can be even more dangerous. When Kirk Hamilton was being prepped for an endoscopy, he overheard another patient giving her medical history. “Had she been aware that I could hear every word she said, she would have been so humiliated,” says Hamilton, an architect at Houston-based Watkins Hamilton Ross and a board member of the Center for Health Design. “It altered my own perception about what I might have said. It’s a scary thing to realize that the physical setting may hinder people’s willingness to cooperate and be a good patient.”

Bring your friends and family. Patients with a high level of social support experience less stress and recover quicker than those who don’t have a support network of family and friends. More and more hospitals provide furniture that can be positioned in small flexible arrangements, both in the patient’s room and in visitor’s areas, including

chairs that unfold into recliners for friends who want to spend the night. A number of Planetree hospitals have redesigned nursing units to include family social areas with kitchens, large-screen TVs with VCRs and libraries of consumer health publications relevant to patients on the unit.

Anti-microbial, easy-to-clean, industrial-strength fabrics and floor coverings are constantly improving and evolving, keeping pace with research showing that soft upholstery, comfortable chairs and even floor coverings all make a significant difference to a patient’s well-being. One study compared elderly rehabilitation patients in identical single rooms; visitors stayed twice as long in the rooms that had carpeted floors versus those that had vinyl composite flooring.

Accentuate the positive. Lack of positive stimulation can be numbing and depressing, not only for patients but their caregivers. When Carolyn BaRoss’ grandmother was ill, BaRoss, an associate principal at New York City architecture firm Perkins & Will, was horrified by her hospital room: walls painted in an institutional blue high-gloss that highlighted every imperfection, wall-mounted fluorescent light fixtures over the bed, gray floors and no decoration. “I was

Soft upholstery, comfortable chairs and even floor coverings all make a significant difference to a patient’s well-being.



depressed just walking in there," BaRoss recalls. "Here was a woman who had a lovely home and beautiful things. I couldn't imagine her feeling well in that environment."

These days, BaRoss focuses on the footwalls of patient rooms, incorporating natural wood cabinetry, shelves for personal photos and mementos and a whiteboard for nurses and family members to write messages on "because that's what the patient is staring at all day." Similar "positive distractions" that reduce patients' preoccupation with their discomfort by elevating their mood include gardens, working fireplaces and appropriate artwork.

Eliminate environmental stress.

Noise, poor air quality and glare from fluorescent lighting are among the most deleterious sources of stress, especially if their presence is difficult to ignore. "A patient who is awakened by the hospital paging system, or who has their sleep disturbed by employees talking in the hallway when the patient can't close the door, is likely to experience negative stress," comments Hamilton. That's why more hospitals are following the example of the Mayo Clinic, whose wireless paging system eliminates overhead paging. Ulrich has recently been pushing facilities to install lighting systems that emulate

natural light, brightening during the day and dimming at night. "Your inner clock really needs it," says Ulrich.

As the research becomes more conclusive, hospitals are increasingly redesigning or retrofitting to promote a healing environment and documenting the results. Some of the findings have been astonishing. At the Karmanos Cancer Center in Detroit, sickle-cell anemia patients who had moved from an old wing to a new wing designed according to the user-centered principles were able to control their pain with less medication and attain the desired clinical outcomes. There was, however, an unanticipated increase in the average length of stay. The environment was so supportive; it turned out, that no one wanted to go home.

Hospitals are increasingly redesigning or retrofitting to promote a healing environment and documenting the results.

