Healthy Hospital Designs

Improving Decor and Layout Can Have Impact on Care; Fever Fractures and Infections

By MORRIS BROWN

HOSPITALS, long a victim of bad design and dreary decor, are finding that improving their layouts and their looks can translate into better health for their patients. Take the Barbara Ann Karmanos Cancer Institute in Detroit, which was gutted and renovated two years ago. Before the overhaul, it had the institutional feel of hundreds of hospitals across the country: dirty beige walls, fluorescent lighting and cramped patient rooms. The redesign infused softer colors like pastel blues and green on the walls; warmer, indirect lighting; wider hallways and doors; and pullout beds for visitors.

At first, hospital administrators figured most of the changes would be cosmetic, but in tracking some patients with rare, life-threatening conditions, those who had checked into the hospital both before and after the redesign, found that on average, the patients gave themselves 40% less self-administered pain medication in the refurbished facility. Among a group of patients with prostate cancer, those who were admitted after the redesign outscored the hospital an average of 23.5% less than those others who had checked in beforehand—again, largely because of the reduced use of pain medication.

There is no question in my mind that a calming, healing environment helps patients deal more effectively with their pain,” says Michael Henderson, a physician and chief medical officer at the institute.

The idea that a building’s layout, furniture and decor influence patients’ medical experiences isn’t new. “It’s something we intuitively feel,” says Peter J. Lynn, executive vice president of the Center for Health Design, a nonprofit group that advises health-care executives and product manufacturers in Freemont, Calif., who says, “There was nothing out there to hang your hat on.” Hospital executives “were saying if you want funding, you need to prove to me that if you do X, you’ll make Y happen. I can’t just trust you with my $30 million on a hunch.”

So two years ago, the center decided to prove its theories. Together with 10 hospitals or facilities that had either recently built or renovated facilities were planning to do so, it launched a series of research projects. Now, the results of some of the design changes are starting to be measured.

At Methodist Hospital in Indianapolis, Clarion Health Partners Inc., renovated its cardiac wing and redesigned rooms so that patients wouldn’t have to move from critical-care units to recovery bays. Afterward, the number of patient falls dropped 60%, says Ann Hendricks, a former Clarion executive who worked on the renovation.

Brossom Methodist Hospital in Kamloops, B.C., built a new 300-bed facility two years ago with only private rooms. Since then, officials have noted a sharp reduction in hospital-acquired infections. The new single rooms also allow doctors to have more privacy—and in many cases more throughput—conversations with their patients. “I’m often talking about life and death issues and the intimate details of medical history,” says Mark Marlowe, chief surgeon at Brossom. “I don’t think these things can go on when there isn’t another patient and family just beyond the wall.”

The change is also helping the hospital’s bottom line: In the past, doctors had spent about $30,000 each year to transfer patients who had problems with their roommates or infection-control issues, says Frank Furnace, chief executive of Brossom. “We view private rooms as a cost-saving mechanism,” he says.

Until recently, most hospitals were designed almost by accident, with new wings sprouting without much thought of how they fit with what had been built before. But now, there’s a boom in new building. Hospitals are anticipating rapid growth in demand from baby boomers, and health-care facility construction is expected to increase 17% this year, compared with 9% growth in construction overall, according to P,E,B,ill Construction.

All that building is giving hospitals the opportunity to rethink how they want their wards to look and function. Naturally lit atriums and meditative gardens are more frequently, driven by studies that show exposure to nature reduces stress and speeds healing. Many hospitals are breaking up nursing stations into smaller pods and moving them closer to patients’ rooms, with some hospitals installing computers outside many rooms so that nurses and doctors can check charts and fill out paperwork electronically. One company, Carolina Curtains Co. in Carolina, S.C., even began selling curtains covered with beach and gardens scenes for hospitals to install around patient beds.

To help shake it out of conventional thinking about waiting-room design, Memorial Hospital & Health System of South Bend, Ind., hired Mr. Klev, designer of the Palm V hand-held computer and the New York emporiums of fashion-house Prada Group NV, to aid in planning a new cardiac ward. “One idea recommendation: a waiting area broken up into private alcoves for individual families,” says Dr. Klev.

“There is so much impetus on satisfaction of the customer, and that’s very much part of our desire to make the family as satisfied as they can be,” says Beverly Tregaves, a nurse and executive director for critical-care and cardiovascular services at Memorial.

Even changes that seem merely aesthetic can have an impact. In a surgical recovery room at Swedish Hospital in Seattle, John Pangrasso of the National Institute of Building Sciences, which designed the room, placed small still-life paintings over cubbyholes containing oxygen masks, suction lines and blood-pressure cuffs.

“It’s not so intimidating to people who really don’t like hospital-like settings,” says Ginny Bursett, a nurse and manager at Swedish. “It helps to foster a feeling of wellness.”

To be sure, patients are more concerned about the equality of their doctors and nurses than whether they have well-lit rooms or wide hallways. Even factors like noise levels in and around their rooms aren’t a major factor in patient satisfaction scores, says Deirdre Mylot, manager of research and development at Press Ganey Associates Inc., a South Bend, Ind., company that conducts patient surveys for hospitals.

A new bathroom (right) at the Barbara Ann Karmanos Cancer Institute in Detroit, compared with one of its predecessors.

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But changes in design can help both staff and patients. When Chicago’s Northwestern Memorial Hospital replaced its antiquated facilities with a new 1,000-bed hospital three years ago, it put in window seats that fold out into beds so that family members can spend the night in all of its patient rooms. “The advantage for the staff is that now the family isn’t underfoot,” says Cynthia Barnard, a hospital executive. “The room design actually helps the nurses help the patients.”

Meanwhile, Northwestern’s scores in Press Ganey surveys, previously in the 20th percentile, are now clustered between the 80th and the 85th percentiles.