

Obesity

and its Effects on the Spatial Environment

Years ago when I graduated from design school I would never have imagined that I would see the day that typical interior design space planning would be impacted by the increase in size of “we humans”. I certainly did not expect to be observing bariatric surgical procedures or speaking with bariatric candidates about the sadness they experience everyday.

by
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Obesity and its Effects on the Spatial Environment

Interior designers are trained in the observation and programming of interior space. Though comfort, functionality, and durability are important, equally important is the overall “feel” and experience people have while in the space.

When designing healthcare spaces, the type of facility it is determines these parameters. Is it a Women’s Center? Is it an Oncology Center? During the programming stage, defining patient, visitor and care provider needs assures the healthcare space is planned appropriately. The practice of Obesity Management and Bariatrics (branch of medicine dealing with the causes, prevention, and treatment of obesity) now brings a new facet into the equation of needs-based planning.

Due to the rise of obesity, architects and interior designers are faced with new interior design challenges. Humans in general are larger, and the obesity problem is at epidemic levels. The percent of adults age 20 and over that are overweight or obese is 64%. The percent of people who are obese is 30%. It is estimated that between 5 and 10 million of the obese are morbidly obese, or suffering from “clinically severe obesity”, meaning they are at least 100 pounds over their normal body weight.

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This phenomena has already resulted in changes in the way bariatric environments are designed. Among them, doors are now designed to be wider -- 42” and 48”. Toilets are further offset from the wall and are not wall hung. The overall size of the lavatory has increased. In patient rooms ceilings are being reinforced to allow the installation of lifts to aid in patient transfer. This helps prevent back injury -- one of the most common injuries reported by healthcare workers.

Furniture, width and weight capacity has also increased. Bariatric furniture is now being developed to test at 1,200 pounds at impact. Keep in mind that in most cases people beyond 500 pounds may not have the ability to walk, at least not with ease. They require wider, reinforced wheelchairs and patient beds, some with hydraulic lifts. The cost for these items alone is staggering. A typical patient bed may average around \$6,000 to \$8,000.

Oversized beds for the morbidly obese are averaging around \$12,000.

Ambulances too, are faced with the challenge of morbidly obese patient transfer. Currently, the interior of the ambulance and ambulatory helicopter is

emptied and the patient is placed on the floor.

Current research and trend information supports a movement toward understanding the psychology behind the environment and its influence on patient comfort, care partner trust and care provider employment satisfaction. With regard to bariatric and weight loss centers, research shows that the obese and morbidly obese suffer not only from obesity, but from co-morbidities, such as high blood pressure, heart disease, diabetes, and cancer. These are some of the physical conditions that centers must deal with, but psychologically, the battle has been a long-term patient struggle with maintaining dignity and self respect.

Obese patients are individuals who need to visit their physicians regularly. Often times the discomfort they feel when entering the traditional medical facility discourages their willingness to keep an appointment therefore decreasing their chance of receiving good healthcare.

Morbidly obese individuals, in most cases, become reclusive because of years of cruel stares and comments that chip away at their self-esteem. Trips to the physician’s office usually consist of the patients making their way from the front door to the check-in desk, only to find a bench designated as the “big person’s” bench located right

beside the check-in. On a recent observation I watched a morbidly obese man walk outdoors in the cold to sit on a concrete wall. The wall was sturdy enough for him but more importantly it gave him freedom from embarrassment. The fact that scales large enough to weigh all sizes of people are not in every office is humiliating. Physicians around the country have been known to ask patients to go to the local Feed and Seed Store or Highway Weigh Station to be weighed. Loss of dignity comes from years of embarrassing episodes. Being able to fit into a chair without the worry of breaking the seat or getting stuck in it is where we as a manufacturer can make a difference.

In space planning for the present and future, designers and medical center staff need to consider building environments that encourage cohesiveness to create a “seamless environment”.

Providing physical and emotional comfort to the patient is of course the goal in healthcare space design. Furniture that supports the bariatric patient must go through the appropriate testing for impact to assure safety and stability. Current healthcare furniture design has

come a long way, but taking the clinical “look” out of the design is still a challenge for today's healthcare furniture designers. The goal for our company is to develop a variety of styles that allow the interior designer to provide a comfortable space that does not include “the big person’s” seat or ruin the intended design motif with “only function” furniture that lacks style.



Club Grande
by Brayton

Textile choice also needs to be considered. Bariatric clinicians typically use spray cleaner after every patient visit. There are many offerings in regard to textile finish. It is the responsibility of the sales representative to research what cleaning methods will be used and the areas of application. Marty Gurian with Designtex is an excellent information source to match appropriate finish specification with application needs. Furniture is only as good as the finish and textile applied. And textiles have come a long way – most are beautifully patterned with a soft hand, and can be antimicrobial. Recent Designtex textiles introductions are right in line with the current trend of creating a warmer more nature inspired environment for health-care. Gone are the days of cold vinyl that eventually cracks and needs to be replaced.

Aesthetically, color is critical in all types of medical facilities. Bariatric facilities need to exude a sense of calm. Color and pattern inspired by nature can provide a palette that encourages relaxation. I encourage all designers who specify color to do a color psychology self-study. Bright, bold geometric patterns may be appropriate in a children's hospital environment, but for bariatric patients, bold colors and sharp images can be anxiety-producing. Artwork, reading material, water features, gardens, and music are also very important to encourage patient comfort. The Planetree Philosophy that many healthcare facilities are



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adopting strives for design that supports healing through a nurturing, non-institutional environment. A holistic approach that includes psychological, emotional, and spiritual dimensions combined with a warm nurturing healthcare landscape only encourages wellness.

After many years of practicing interior design, observation and interviews, I understand that the practice of bariatric medicine has some of the most emotive challenges and compassionate physicians, nurses, and team healthcare providers. Though important to all branches of medical practice, comfort through an exceptional patient experience is critical to the success of bariatric and weight loss centers. Times have changed. Healthcare is now a competitive business with selective consumers taking note of brand image. Physicians are no longer blindly trusted. Choice and quality in the experience is expected. The overall goal: an environment that encourages wellness. Focusing on the actual healthcare experience while developing product is where our industry can add value for hospitals, medical office buildings and bariatric specific centers. As a premiere group of collective companies we have the opportunity to do more than sell and manufacture product. We can become solutions providers that help create environments that encourage healing and wellbeing.

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Sieste by Brayton



Tips for Designing Bariatric Facilities

Just as we can become blind to flaws in our own homes, we can become blind to flaws in our work environment. When designing a healthcare space I encourage all who will be leading the project to walk through their existing space as if they were the patient.

Establish a team within the practice to look at the environment with fresh eyes. Have a staff member act out the patient experience from the moment he or she arrives at the door through the end of the visit. For a more accurate sense of what it's like for the obese to navigate space consider renting an obesity suit. Things you should consider include:

Is the signage clear?

Are the passageways wide enough?

Are there seats available for larger people within the seating areas? Will the patient fit into the seating? Can the seating accommodate all scenarios of people and human interaction that may take place? Is the seat high enough for easy access and sturdy enough to provide support when sitting down and pulling up? Is the seating in good shape? Is the fabric retaining an odor?

How does the color and lighting make the visitor feel?

Listen to the environment. Is it noisy?

All healthcare practices would benefit from the observations and changes that come out of this exercise. And as a result a better healthcare environment will be created that will provide a better patient experience.