

By Michael Ufer and George Mann

# AN INTEGRATED experience

Furniture is a crucial design tool

**H**ave you ever experienced an environment that, upon seeing it or entering into it, you knew you were in a special place? What made you feel this way? Was it the warm welcome you received? Was it the physical surroundings that comforted you?

Or was it the positive memories the space evoked?

Integrated environments are designed with this experience in mind. Every detail is working together — the exterior architecture, the interior environment, the use of building materials and finishes, as well as the design and placement of furniture and art.

Healthcare environments today are designed to engage the whole person. Spaces are purposefully designed for an integrated experience that responds to the mind, body and spirit of the patients and families as well as the staff, nurses and doctors who use and operate the facility.

Crafting an integrated design experience in healthcare requires a diverse team of designers, planners, architects, researchers and builders who have discussed, explored and examined all aspects of the design from its inception. What is the design vision for the project? What are the cli-



**Furniture can serve as respites, providing calming views for guests and patients in major circulation paths, such as at the Arkansas Medical Sciences Center in Little Rock, Ark.**

ent's expectations? Does the built form embrace the surrounding context or create its own? What will patients and their families remember once they have been discharged?

Exploring these types of questions as well as the architectural design elements as a team allows the client and each of the team members to bring their expertise to define the overall project aesthetic. It is this team exploration that defines the project environment and the integrated project aesthetic.

How furniture is integrated into the overall architectural environment, whether traditional, contemporary or transitional, is a key element in how users respond to a space. Furniture for the front-of-house areas can be defined

into four broad areas: public, family, patient and support, each having varied user and operational needs.

## Articulating with furniture

Healthcare settings such as public and family areas require design elements that comfort and restore harmony during times of stress. Articulating the furnishings, lighting and finish palette can do much to offer an environment that is both functional and practical for the physicians and staff, while at the same time providing a soothing and hospitable space for the patient's family and friends. Waiting areas can be arranged in different ways to accommodate varying needs.

Comfortable lounge seating set in hospitality groupings allow large family groups to gather for rest and fellowship, while a ganged seating is geared to handle multiple guests for short-term periods.

The function and requirements of the guests will drive the furniture needs for the waiting space, with considerations such as the length of time being used, comfort, ease-of-use and flexibility of the seating, tables and lighting. The need for positive distractions to help pass the time is critical. These can include game or puzzle tables, fireplaces, piano, televisions or computer stations incorporated into the furniture groupings. Long-term waiting environments should consider more comfortable seating, such as recliners, as well as the range in physical needs of the family members including geriatric, bariatric and pediatric.

Patient rooms can offer a diverse opportunity for furniture selections, requiring allocations for the three different zones within the patient room. The caregiver zone provides caregiver access to the patient, supplies and equipment. The patient zone includes the patient's bed, chair, headwall, footwall and the storage of personal belongings. The family zone provides space for family members to stay overnight.

Clinical research from manufacturers has yielded specific elements for the patient's chair. An orthopedic patient chair can incorporate a seat higher than the standard 18 inches, allowing the patient ease in entering and exiting the chair. The pitch of the back of a patient chair can be adjusted to allow for increased lung function, and a mesh seat and back can relieve stress points and increase circulation. The footwall, the patient's focal point, can incorporate furniture elements, which include a television, clock, marker board, worktable, display shelves and a wardrobe to store personal belongings.

The family zone includes an area for overnight stays, with adequate sleep surfaces and work areas. Generally, the family zone includes a sleep chair or sleep sofa that can be transformed into seating during the daytime. Function and ease-of-use is critical in allowing the family member to prepare this space without medical staff assistance. Sleep sofas are offered with options such as

integrated tablet arms, or lightweight mobile tables that can provide family members a work surface incorporating amenities to allow individually controlled lighting and televisions that can be used without disturbing the patient.

Support areas for staff, family members and guests are critical to their comfort and well-being. Nourishment centers, separate from waiting areas, finished with tables and chairs to sit and enjoy a snack provide a change of scene

needs and requirements, family furniture is selected to offer the comforts of home, while supporting the overall design aesthetic.

### Selecting the right furniture

With the market inundated with new healthcare furniture companies, it is critical to focus on products that are not only innovative and durable but are easily serviced and have an excellent warranty.

The healthcare furniture industry has



**Patient rooms, such as the one at Homestead Hospital in Homestead, Fla., feature personal areas including shelves, desktops and drawers for flowers, cards, clothing and laptop hookup.**

and a place for private conversation and reflection. Staff support areas, which include work surfaces, file space and task chairs, offer ergonomic support and ease-of-use and are critical to ensuring that the patients receive the best care and personal well-being.

Furniture should not only respond to the design intent of the architectural elements but should also aid the patients and their families in the healing and recovery process. While the patients' furniture is selected to meet their medical

a multitude of manufacturers that provide extensive research in the development of product offering. The appropriate selection will provide a viable solution that can, and has, served the 25-year and greater life span of the product. Re-upholstering the furniture may be required after a period of time, which is a sustainable solution to enhance the facility's aesthetic with little waste and only a small investment.

The most expensive furniture in a patient room usually is either the patient



## In brief

### Colorado company seeks to keep old furniture out of landfills

Citron WorkSpaces, Colorado's environmentally focused office furniture resource partner, is sponsoring a free online materials exchange community, FACILITYcycle.com, designed to reduce, reuse and recycle facilities waste. FACILITYcycle is designed to help business owners, facilities managers, real estate professionals and others help keep old facilities items such as furniture, equipment, building materials and more out of landfills.

Visitors can create a free account and log in to sell or trade used items to other businesses; find and buy used furniture and equipment; donate used items to non-profits, start-ups, and other organizations with limited budgets; or find reliable, qualified local recyclers.

FACILITYcycle was originally conceived as a way to address a relatively unpublicized problem in the business community: furniture disposal. Each year, when businesses shut down or upgrade their furniture, the majority of discarded product becomes part of the more than 8.8 million tons of landfill waste created by used furniture, cubicles, equipment, and other materials being thrown in the trash.



### Study: Children often injured by furniture

Although most parents do not consider furniture and televisions to be dangerous, children are often injured when these items tip over. A recent study conducted by the Center for Injury Research and Policy of The Research Institute at Nationwide Children's Hospital found that from 1990 to 2007, an average of nearly 15,000 children younger than 18 visited emergency departments annually for injuries received from furniture tip-overs.

According to the study, published in the online issue of *Clinical Pediatrics* in May, most furniture tip-over-related injuries occurred among children younger than 7 and resulted from televisions tipping over. More than one quarter of the injuries occurred when children pulled over or climbed on furniture. Children ages 10 to 17 were more likely to suffer injuries from desks, cabinets or bookshelves tipping over. Head and neck injuries were most common among younger children, while children older than 9 years were more likely to suffer injuries to the lower body.

"There was a more than 40 percent increase in the number of injuries during the study period, and the injury rate also significantly increased during these years,"

said study senior author Dr. Gary Smith, director of the Center for Injury Research and Policy at Nationwide Children's Hospital.

### Herman Miller receives honor

Herman Miller Inc., is among 87 companies to receive gold vendor status from Supply Chain Systems, a MedAssets company. The company also received gold status in 2008.

The award recognizes outstanding vendors that improve customer savings and customer satisfaction, comply with reporting and payment standards, experience continuous growth in purchase volume, strive for environmental excellence and support MedAssets' philanthropic efforts.

MedAssets provides its customers with access to a variety of Herman Miller furnishings, which may be used in all areas of healthcare facilities, including patient care units, administrative areas, pharmacies, laboratories, lobbies and patient rooms.

Herman Miller's extensive line of flexible, modular products for both clinical and office environments enables healthcare facilities to adapt to evolving care giving processes, and the industry-leading warranty and durability also ease costs associated with renovations and potential landfill waste.

recliner or the family sleeper sofa. With the wide range of products available in the market, special consideration must be made to the attributes of each, focusing on the options available that can enhance the value, such as a recliner with self-locking casters, transport casters, laptop tray, in addition to the medical necessities such as Foley hook or IV pole. The cost of these options can be minor in comparison to the benefits over the life of the piece.

Specification of healthcare furnishings and fabrics requires knowledge of the broad base of manufacturers and options available. Most manufacturers allow for site visits of their manufacturing plant, providing a wealth of knowledge to assist the furniture design team as well as clients with opportunities to develop new solutions to meet specific clients' needs.

Healthcare furniture manufacturers are investing in the development of products to address patients' specific medical needs. These needs include healing aspects of furniture that are being developed where patients can receive treatment in recliners, with options such as heated and vibrating surfaces, tablet arms and arm-mounted television screens with DVD players. Knowledge of furniture options available in the industry is critical to supporting the patient and the operational needs of the staff.

### Complementing your healthcare environment with fabric

Fabric patterns can complement the overall design aesthetic by providing a soothing element, a splash of color or simple hospitality elegance. Healthcare fabrics have special needs for durability and clean-ability. Technological advancements in fibers and treatments to these fibers provide solutions for durability and the ease of maintenance without sacrificing the project's aesthetic intent. Fabrics can have moisture barriers inherent in the fibers. Vinyl can take on the appearance of fabric, soft to the touch, or provide write-off technology — allowing for simple cloth wipe-off for any ballpoint pen ink stains.



**McKay-Dee Hospital in Ogden, Utah, includes dining areas that incorporate a lower level of lighting, vaulted ceiling, comfortable seating and a relaxing fireplace — creating a calming and peaceful ambience.**

Advances in furniture design and fabric technology are allowing healthcare interior environments to look more and more like hospitality environments without sacrificing strict performance requirements. Fiber technology has allowed fabric and vinyl styles to advance in recent years, blurring the lines between hospitality and healthcare applications.

Healthcare fabric applications require soothing patterns that do not appear to have movement and are not perceived as dizzying to patients. Furniture elements in the patient rooms such as sleeper sofa surfaces, patient recliners and patient chairs should incorporate an applied moisture barrier or upholstered in a moisture barrier fabric or vinyl to prevent soiling. Wood or poly arm caps can be helpful in protecting the furniture from day-to-day wear.

Most furniture manufacturers have the ability to custom-tailor their products to meet specific client requirements. These adjustments are not necessarily costly and can provide solutions for a specific healthcare client. Generally, a custom is a minor adjustment that can easily be achieved — sometimes the custom requires an approval process through the manufacturer's engineering group, and sometimes a mock-up must

be produced. The process normally requires additional time, yet this process of developing a custom adjustment can provide an excellent solution to meet specific needs.

One option is to allow clients to test a variety of furniture options in a furniture show. This is a showcase of various manufacturers' samples to allow the clients' staff, administrators and patients to review multiple options and vote on the best fit for their application. This also allows for involvement of the clients' operational and facility groups to evaluate and provide input on the furniture before purchasing — leading to a higher level of overall satisfaction.

Designer supervision of the furniture during installation provides the opportunity to confirm the project installs as designed. It also is an opportunity for a furniture punch. The furniture install is usually one of the last things to take place before the client occupies the space, which is a great time to solicit staff and administrator feedback on the completed project.

The selection and placement of the appropriate furnishings that support the design intent of the architectural elements as well as the patient's medical needs and clients' operational needs is an exercise in the integration and collaboration among the interior design team, the furniture manufacturers and the clients' staff. ■

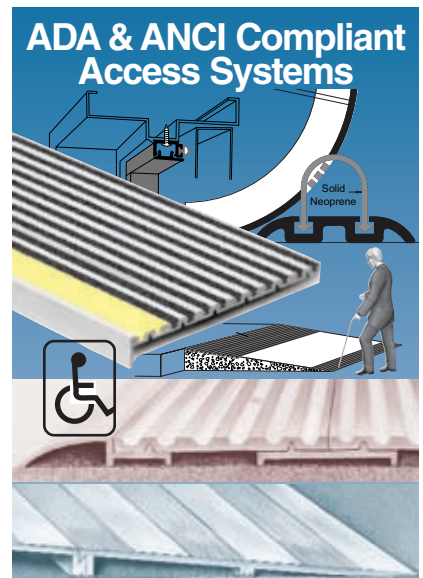


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