



# Furniture Standards for Healthcare Facilities



*In today's fast-paced healthcare environment it's critical both to respond to change quickly and to control costs. In such an environment, implementing a standards program for basic commodities makes sense. Standardizing on durable, modular furniture,*

*for example, can help an organization manage its inventory, fully use its furniture investment, and respond to change on a dime. While the cost savings can be significant, peace of mind for facility managers is priceless.*

Technologies evolve. Laws and mandates come and go. Patient populations ebb and flow. Change is certain; its pace and direction is not.

Equally intense is the pressure to reduce costs, eliminate waste, and manage resources efficiently. A significant portion of any organization's investment lies in its bricks and mortar as well as what furnishes its rooms. In 2004, 50 percent of the market capitalization of 6 major long-term care chains was tied up in "property, plant, and equipment—far too large a percentage to ignore."<sup>1</sup>

For any organization, managing its material resources and maximizing its return on investment are critical pieces of overall cost containment.

## What We Know

"The need to address change goes beyond anticipating that an exam room today might be a doctor's office next year. A room could be used for pediatrics on one day and for dermatology the next," says Kerrie Cardon, Herman Miller knowledge marketing and design facilitation lead.<sup>2</sup>

Standardization may sound regimented and dull, but consider the benefits:

### Rapid response to change

When parts are interchangeable and limited in number, change happens quickly and can often be handled in-house. "We can raise or lower work surfaces, add a keyboard tray or do any quick modification within hours," says Frederick Bensch, director, Facilities Planning, Community Hospital of the Monterey Peninsula.<sup>3</sup>

### Improved cost efficiencies

From the initial purchase to the umpteenth move, standards save money. "Inventory is limited; processing and purchasing are streamlined; everybody knows the product, so they can move an office around quickly. It's like a ripple effect," says Mike Flaherty, Herman Miller account development manager.<sup>4</sup> For example, after incorporating a standards program, one large, Midwestern healthcare organization was able to save about \$33,350 per year simply by significantly reducing the number of purchase orders it processed. This same organization saw similar savings in planning costs and the cost of churn.<sup>5</sup>

Budgets are easier to project because the products and their prices are predetermined. Also, with high-volume purchases and the potential for ongoing business, an organization has the clout to negotiate for better pricing, even within the structure of a Group Purchasing Organization (GPO) contract.

Finally, organizations can avoid the rigorous, redundant process of evaluating and planning each new project, according to Kurt Lavaway, AIA, an associate with S/L/A/M Collaborative. "Decisions can occur much faster in future renovations helping architects, designers, and engineers specify an already proven product each time a space is renovated."<sup>6</sup>

### Better materials management

Inventory is easier to maintain, track, and reuse, and there tends to be less of it. "Without standards, we built up an inventory of obsolete product," says Roger Wojtowicz, director of Facilities, Lake Forest Hospital.<sup>7</sup> By standardizing on a limited number of products, staff becomes familiar with the product, and "the facilities department will know how to adjust, clean, and maintain those standard items," he says.

### Consistent aesthetic

When a "new" look is created with each renovation or addition, an organization ends up with patchwork of different interior styles. Standards help an organization avoid the piecemeal look. Not only is a well-designed, consistent look attractive, but it can also reinforce the organization's brand.

## Problem statement

Despite intense pressure to cut costs and increase efficiency, healthcare facilities are more often encumbered with multiple brands and lines of products that are both inflexible and incompatible. This can be a significant impediment to efficiency and cost-effectiveness—and it is an ongoing headache for facility managers.

Further, most healthcare campuses are a patchwork of additions and renovations, each with different interior designs, finishes, and furnishings. The result is that organizations end up with a hodge-podge of product, and they lose the ability to project a consistent and

identifiable brand. Inventory becomes bloated and unmanageable, and projects often require purchasing new product because items in the warehouse can't be located or aren't compatible.

## Therefore

Very movable, mix-and-match interiors with fewer sizes, options, and finishes can be a good thing for a manager's mental health, not to mention an organization's bottom line.

## Solutions

Standards programs can be implemented in many ways. "Even if the rest of the facility isn't standardized, a department could create its own standards," says Wendy Muth, application strategist, Herman Miller.<sup>8</sup>

A facility-wide approach is best, however. This could involve broadly defining the sizes of rooms and the type of componentry within them. (For example, all exam rooms are 9 feet by 12 feet with an exam table in one corner, a side chair, a stool, and wall-mounted equipment.) Or, at a more rigorous level, a facility could fully standardize on specific product lines as well as their sizes and finishes. In this case, the products and finishes should be as interchangeable as possible. To that end:

- Consider sizes that mix and match. For example, products based on two- and four-foot units are more versatile than those based on three- or five-foot units.
- Choose standard, rather than custom, finishes. Standard finishes are likely to be available longer and to match from one manufacturing run to the next. For example, switching to standard finishes from its original choice of custom colors immediately saved the Brooke Army Medical Center \$125,000, and "those standard finishes are still available, while the custom materials are all discontinued," recalls Brad Johnson, designer, Workplace Resource of Texas.<sup>9</sup>
- Choose the most limited finishes first. Herman Miller, for example, offers hundreds of fabrics but far fewer paint colors. Once the paint color is chosen, coordinating a selection of fabrics is easy.
- Select a palette of fabrics, rather than just one or two, to complement the more limited finishes.
- Finish the floor underneath the furniture. Change can't happen quickly when the floor needs to be tiled or carpeted the first time the furniture is moved.

Beyond projecting costs more accurately and capturing a far better return on investment, a standards program enables an organization to reduce inventory, manage change efficiently, and create a consistent, identifiable brand, as the following three healthcare organizations have discovered.

### THE COMMUNITY HOSPITAL OF THE MONTEREY PENINSULA

The Community Hospital of the Monterey Peninsula is a striking example of the timeless quality of beautiful design. For over forty years, the building's architecture as well as its interior design has remained fresh, functional, serenely beautiful—and nearly unchanged.

Nestled among the Monterey pines in the heart of California, this 250-bed facility was designed by renowned architect Edward Durrell Stone in the early 1960s. With low, horizontal lines and 8-foot overhangs, a 40-foot koi pond, fountains, skylights, large windows, and patient balconies, the hospital creates the kind of natural healing environment that the science would come to support only decades later.



Community Hospital of the Monterey Peninsula main entrance.

Recently, the hospital has added two pavilions that more than doubled its size, and the original interior is undergoing extensive renovation as well. Yet, even in the new buildings, the hospital has kept its distinctive look—the architectural features, the "Community Hospital of the Monterey Peninsula pattern" of three concentric squares, even the gold carpet and the rattan furniture. In fact, it's a point of pride with the hospital that the new additions are indistinguishable from the original facility.

“Hospitals make a mistake when they generate a ‘new’ and an ‘old’ with very little continuity between them. At the Community Hospital of the Monterey Peninsula, the buildings are seamless, and the standards are timeless,” says Frank Vitale, consultant and the former facilities director.<sup>10</sup>

Indeed, the Community Hospital of the Monterey Peninsula has standardized on some of Herman Miller’s earliest systems and healthcare furniture: Action Office® system, along with an assortment of clinical product, such as Ethospace® Nurses’ Stations, the Co/Struc® system, a variety of carts, and Equa® chairs. The hospital has maintained these standards for over 40 years, and some of the original product is still in use.



Ethospace nurses’ station with Equa chairs.

One advantage of this approach is that the hospital knows the product well. When its out-of-the-way location made service expensive, the hospital created a “Service Center” of its own and forged an alliance with LaMar Associates to manage it. The center is a small warehouse where inventory is stored, refurbished if necessary, and reused. Trim pieces may be painted; chairs may be repaired; panels may be refurbished.

Together with the facilities department, the hospital handles all its moves and changes in-house. “Our Service Center processes about 50 or 60 work orders a month, from installing a keyboard tray to moving and changing workstations,” says Frederick Bensch, director, Facilities Planning. Small changes can be made within hours, a level of responsiveness that keeps employees happy.



Main hospital lobby with koi pond.

The Community Hospital of the Monterey Peninsula secret has been to create minimalist, well-designed spaces with components that are mobile, durable, beautiful, and easy to replace, and to resist the temptation to redecorate. “Now, we allow three colors on the walls,” says Mr. Bensch. “From the beginning, we always considered life-cycle costs and bought first-rate product, knowing that it would last longer. Herman Miller is like that. It just lasts forever.”

#### THE BROOKE ARMY MEDICAL CENTER (BAMC)

At 30 million square feet, the Brooke Army Medical Center (BAMC) is a monolith, and it is only part of a massive reorganization that will eventually combine two such medical centers to create a single, mammoth campus—the San Antonio Military Medical Center.

Presently, the BAMC houses the military’s only Level 1 Trauma Center; its only burn center; and one of two amputee centers. It has 224 in-patient beds with the capability of expanding to 450 beds in case of an “event.” Its emergency room receives 4,000 visits every month. With this level of complexity and volume, the BAMC is also a paragon of flexibility. Literally hundreds of 10-foot by 10-foot rooms can transition from an exam room to an office within hours. Since its construction in 1996, reconfiguration throughout the facility has been constant, and the ongoing reorganization continues to test the limits of flexibility.

The critical element to this ability to respond to changing volume, technology, and function has been standardization. Years ago, so the story goes, when the BAMC was under construction, its new commanding officer had just returned from deployment in the field.

He looked around at dozens of incompatible brands of furniture from the old facility and asked, "If we can standardize on tanks and bullets and body armor, why can't we standardize on furniture?"

Since then, furniture standards at BAMC have been simple, and they are rigorously applied. Action Office® components for both clinical and office applications in three panel heights (where panels are used) and either 24-inch or 48-inch widths. Parts for about a dozen workstations are stored in the warehouse. "The point is to maintain a small inventory. If we introduced another panel height, for example, we'd double the inventory," says Brad Johnson, designer, Workplace Resource of Texas.

All the furniture is one color: a silver-gray. Offices and exam rooms are based on three typical configurations that use some combination of a work surface, flippers, display shelves, tackboard, and paper management accessories. The rooms are equipped with a grid of wall strips spaced two feet apart, so clinical and office componentry can be reconfigured and interchanged. Laboratory areas are furnished in Co/Struc product. Herman Miller carts are used extensively throughout the facility. Seating is Caper®, Equa®, and Ergon, with some upgrades to Aeron® chairs.

The beauty of the system is that, in addition to simplifying inventory, reconfiguration is also easy because both the product lines and vendors are limited. Herman Miller supplies both office and clinical furniture, all of which are totally interchangeable. BAMC facilities staff can handle small changes in-house, not only responding quickly to the constant change requests, but also avoiding the expense of outside service providers.

As the military moves forward with its giant reorganization, it will keep the same standards that have been in place for 15 years. Durable, modular Herman Miller furniture along with rigorous standards provide the extreme function and flexibility this military operation demands.

#### **LAKE FOREST HOSPITAL**

Roger Wojtowicz is director of facilities at Lake Forest Hospital, a 225-bed, 1,000,000-square-foot facility in Illinois. Fifteen years ago, he walked into the hospital's "attic" warehouse, and he found 14 product lines from two furniture manufacturers, 200 paint

colors, 250 wallpapers, and 50 chair lines. "We decided to sit down with the manufacturers and standardize, because the inventory was out of control," he recalls.

So, Herman Miller was selected and could provide "the horsepower and capacity for service support and also a very competitive price," Lake Forest standardized on Ethospace product for offices and nurses' stations, Meridian® storage, Equa and Aeron seating, and on Co/Struc product in clinical areas, such as the lab and pharmacy. Colors are limited to a basic off-white with blue or green accents on the accessories.

The advantage of standards, according to Mr. Wojtowicz, is cost control because product is used efficiently, inventory is managed better, and architectural costs are lower. According to Mr. Wojtowicz, modular products are "like a jigsaw puzzle, you can move them around with minimal cost," instead of continually redesigning custom casework. The attic at Lake Forest now averages around 5 to 10 percent of inventory, all of which is completely interchangeable with the product on the floor.

"If you don't standardize, inventory will quickly become 20 percent," says Mr. Wojtowicz. "It takes up space and it's hard to maintain." Typically, 34 percent of the product used in a reconfiguration at Lake Forest comes from the attic, and much of that product has been in use for 15 years. "Herman Miller has been able to support both the product and the finishes for that long," says Mr. Wojtowicz. In 2007, the hospital saved \$123,700 by reusing that one-third of product in its reconfigurations rather than buying new.<sup>11</sup>

When technology or function changes, the puzzle pieces are simply rearranged. When the hospital installed a large machine for automatically dispensing meds in the nurses' stations, for example, "without much disruption we just removed a work surface and the flipper door units and took them to the attic," says Julie Ritter, account development manager, Herman Miller.<sup>12</sup>

Familiarity with the product and the provider is another advantage for Mr. Wojtowicz. Users know the product well, so their "orientation curve is very low," says Mr. Wojtowicz. And by establishing long-term relationships with the manufacturer, "we're basically business partners."

Standards take time and cooperation to implement, and they require commitment to maintain. But, after decades of experience in living with standards programs, these hospitals have maximized the potential of their furniture and have minimized the impact on the bottom line.

## Notes

- <sup>1</sup> Osborn, David, "Healthcare for your facilities," *Nursing Homes: Long Term Care Management*, April 2006, p. 47.
- <sup>2</sup> Cardon, Kerrie. Personal interview. 14 January 2009.
- <sup>3</sup> Bensch, Frederick. Personal interview. 30 January 2009.
- <sup>4</sup> Flaherty, Mike. Personal interview. 5 December 2008.
- <sup>5</sup> "Healthcare Facility Issues: Standards Guidelines Mean Simplicity, Savings, Sanity." Research summary. Herman Miller for Healthcare. 2000.
- <sup>6</sup> Lavaway, Kurt. "Building Design Standards in Healthcare Facilities." Weblog post. *Healthcare Design*. 17 November 2008. <accessed 22 December 2008 at <http://www.healthcaredesignmagazine.com>>.
- <sup>7</sup> Wojtowicz, Roger. Personal interview. 28 January 2009.
- <sup>8</sup> Muth, Wendy. Personal interview. 23 January 2009.
- <sup>9</sup> Johnson, Brad. Personal interview. 15 December 2008.
- <sup>10</sup> Vitale, Frank. Personal interview. 28 January 2009.
- <sup>11</sup> "Lake Forest Hospital Corporate Visit." Herman Miller for Healthcare. 2007.
- <sup>12</sup> Ritter, Julie. Personal interview. 19 January 2009.

© 2009 Herman Miller, Inc., Zeeland, Michigan

© **HermanMiller Healthcare**, Action Office, Aeron, Capex, Co/Struc, Equa, Ergon, Ethospace, and Meridian are among the registered trademarks of Herman Miller, Inc.