



Universal Design Principles for Your Medical Office

Make your space comfortable for everyone

By Daniel Casciato

From a personal standpoint, Danise Levine has never stepped foot inside a medical office where she saw it designed using universal design principles.

"They follow the standards set forth by the ADA (Americans with Disabilities Act) and building codes and don't seem to go any further," says Levine, an architect and assistant director of the IDEA (Inclusive Design & Environmental Access) Center at the University of Buffalo in Buffalo, N.Y.

While ADA design requirements meet the needs of people with disabilities, universal design calls for all communications, products, and environments to be accessible and usable by everyone, regardless of their age or physical ability level. As it relates to the built environment, such as a medical office, in addition to accommodating limitations, universal design features must also be seamlessly integrated into the design of a public space or residence.

"It's not uncommon to see offices being designed around either aesthetics or functionality," says Patrick Lyng, director of business development for Business Interiors by Staples. "But with today's increasing array of furniture and design options, it's possible—and recommended—to design medical offices with both aesthetics and functionality in mind."

For example, many items like adjustable height tables that let employees work when sitting or standing, and ergonomic chairs that adapt to individuals' size and shape, can provide flexibility and functionality, while remaining pleasing to the eye.

"By designing for aesthetics and functionality when applying universal design, medical offices can also increase morale and efficiency," Lyng asserts.

Easy to implement

Universal design is very simple to implement in a medical office if you have the knowledge and it doesn't cost a great deal if done correctly. Levine recommends finding a qualified professional who could assist you in the overall design, layout, product selection, and spatial orientations.

"There should be no challenges if the plan is well thought out and someone knowledgeable in design is involved," Levine says. "Universal design can be implemented in any situation or facility, whether large or small."

The universal design features that can be incorporated into medical offices are the same ones that should be included in the design of any public building. Levine rattles off a few of these features: being located in close proximity to public transportation stops; passenger loading zones that allow vehicles to stop without interfering with pedestrian and vehicular traffic; automated doors; direct access to public amenities from the waiting room, as well as waiting areas adjacent to the entry where visitors can wait comfortably without disrupting traffic.

Lyng says today's medical offices are becoming more cognizant of the diverse audiences they're serving and—through technology, furniture, and design solutions—have made strides in creating environments that are accessible and accommodating to as many people as possible.

"They're also taking legislation like the ADA into account as they design facilities; for example, considering the height of counters to accommodate wheelchair access, designing signage with visual impairments in mind, minimizing unnecessary travel throughout an office, and more," Lyng adds.

There are a variety of ways universal design ideas can be implemented in medical offices, from simple to more complex projects and in the short- and long-term. These include:

- *Increasing wheelchair (and other) accessibility*

Medical offices may look to incorporate automatic sliding doors or doors with "push to open" buttons. Lobbies should have spaces for wheelchairs, and restrooms, likewise, should be designed for wheelchair access (with room to turn around toilets and handrails). Ramps should be available and only have a slight incline.

- *Provisions for privacy*

To improve privacy and in accordance with HIPAA, medical offices can take care to shield workstations and computers from unauthorized viewing. "They may also incorporate partitions in the registration area for patient privacy," Lyng says.

- *Good wayfinding system and signage*

Medical offices should incorporate intuitive layouts, color contrasting and design strategies geared toward wayfinding. "Signage may appear in multiple languages, in Braille and in pictorial representations," Lyng notes.

- *More on visual impairments*

Use color to highlight entrances and exits, and consider full-spectrum lighting that emulates natural light. Make sure there is a clear line of sight to all important areas and elements for both seated and standing users.

- *Exam tables*



photo courtesy of Chicago-based Leslie M. Stern Design Ltd.

Consider implementing bariatric and height-adjustable exam tables.

- **Allergies**

In addition to using furniture with anti-microbial vinyl, offices can make paint, and floor and ceiling tile selections to improve indoor air quality and avoid aggravating allergies. "Products with GREENGUARD and LEED (Leadership in Energy and Environmental Design) certifications improve indoor air quality and promote healthier work environments," says Lyng.

Lighting and acoustics

Good lighting is also extremely important in a medical office setting, says Leslie Markman-Stern, principal of Chicago-based Leslie M. Stern Design Ltd.

"Many people have visual and glare issues," she says. "You need to find lighting to accommodate all of your patients and even your employees. For employees, they need good lighting to work by, while patients on an exam table need overhead lighting that won't cause too much of a glare into their eyes."

Acoustics is also an important universal design consideration. For someone with a hearing impairment, it's more difficult for them to hear speech in an environment where sound is an issue.

"If a patient has a hearing issue, you want to make sure that they can hear what you're trying to say," Markman-Stern says. "Make sure that the ceiling in the exam or treatment room is not too high. Be sure you have some kind of acoustical tile on the ceiling. Fabric on the wall is also helpful in making sure the acoustics in a room is at a level where nearly everyone can hear. And make sure you don't have all hard surfaces, like the flooring, windows, and metals."

Intuitive and equitable use

Medical offices are also striving to incorporate interior design and furniture expertise to make sure their space is designed for intuitive and equitable use. This means taking into account a wide range of literacy and language skills, and visual and hearing impairments, and using different modes to present information from highly visible and multi-lingual signs, to closed captioning on televisions.

"They're also looking to designs that reduce unnecessary travel and wasted space to both accommodate mobility restrictions and eliminate inefficiencies," says Lyng. "At the same time, they continue to take steps to make buildings wheelchair-friendly and accessible."

On the furniture side, Lyng is seeing more offices incorporate bariatric furniture in their offices, as well as furniture with anti-microbial fabrics that guard against dust mites and other allergens. "Having furniture with armrests also aids visitors as they sit down and stand up," he adds.

Planning ahead

No matter what type of practice you have and the size of your medical office, it's important to consider all your audiences, plan for future use, and consult multiple stakeholders, experts and everyday users to ensure that your office space can meet everyone's needs.

"Consider the needs of office staff and patients alike, and know that a well-planned design has a great effect in reducing anxiety among patients, and creating a more favorable work environment," says Lyng. "We incorporate universal design elements in just about all projects we do, also being mindful of legislation, and design codes.

Lyng adds that it's important to start early, plan ahead, and plan for the future. "It pays to be proactive," he says. "By implementing universal design standards now, you can reduce the risk of obsolescence and avoid expensive upgrades later."

In addition, the standard principles should include flexibility within exam rooms to allow medical offices to keep up with the rapid pace of innovation in medicine and technology.

"Furthermore, exam rooms can change function over time from a pediatric focus to adult focus," says Lyng. "This shuffling, which is common, allows the best fit between services and physical units."

Learn more about Universal Design features you can implement by downloading for free the Human Service Facilities chapter (pages 192-202) in IDEA's publication [Universal Design: New York](#).