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Health Equity for All:

Designing for Greater Accessibility in Exam and Procedure Rooms

Designing for accessibility in ambulatory care environments is crucial for ensuring all patients, regardless of their physical, cognitive or sensory abilities, can access and receive appropriate care. It helps break down barriers and fosters an inclusive environment where every individual, including patients and care teams, can engage in enhancing health and well-being.

This Midmark white paper looks at the importance of designing for accessibility when it specifically comes to exam and procedure rooms where most of the patient/caregiver interaction occurs. It also offers suggestions that help individuals involved in the design and construction of exam and procedure rooms ensure accessibility is considered during the design and planning phase of a new build or renovation.

A Growing Need for Accessibility in Ambulatory Care

The need for greater accessibility in ambulatory care is driven by several factors that reflect both the evolving healthcare landscape and the diverse needs of patient populations. To ensure they are designing for accessibility, architects and designers who work in the clinical space need to understand these factors.

Standards + Regulations

Since the inception of the Americans with Disabilities Act (ADA), accessibility has become a legal requirement. The ADA prohibits discrimination against individuals with disabilities in all areas of public life, including healthcare facilities and medical equipment, ensuring everyone has the same rights and opportunities.

However, state regulations concerning spatial relationships in the clinical space can override federal ADA regulations. As these lines become blurred, it can be confusing for healthcare systems to understand how to best provide accessibility and equal care.

A provision contained in the Affordable Care Act mandated the US Access Board to develop accessibility standards to ensure medical diagnostic equipment (MDE) used in physician offices, clinics, emergency rooms, hospitals and other medical settings is accessible and usable by individuals with accessibility needs. The statute covers any equipment used by healthcare providers for diagnostic purposes, including examination and procedure chairs.

In September 2024, the US Access Board released a new standard providing design criteria for examination and procedure chairs, as well as weight scales and other diagnostic equipment, that are accessible to people with disabilities. In October 2024, the Department of Justice (DOJ) began enforcing the US Access Board standard released in 2017.

The new standard released in 2024 is not currently enforced by the DOJ; however, the DOJ has stated its intention to consider issuing a supplemental rulemaking proposing to adopt the new 17-inch low seat height requirement.

Quintuple Aim

The Quintuple Aim is a framework in healthcare that aims to improve the quality and efficiency of care, while addressing health disparities. It helps ensure alignment among cross-functional teams, guiding everyone involved in the project in the right direction to ultimately enhance the quality of care provided. This includes accessibility efforts.

The five pillars of the Quintuple Aim are:

1. Improve provider experience
2. Improve patient experience
3. Reduce healthcare costs
4. Drive better clinical outcomes
5. Achieve health equity for all

Patient Demographics

The US population is aging, driven by the large baby boomer population. According to data released by the US Census Bureau based on the 2020 Census, the US population age 65 and over reached 55.8 million or nearly 17% of the US population in 2020. The 65-and-older age group is projected to increase to 82 million by 2050, with its share of the total US population projected to rise from 17% to 23%.

According to the Centers for Disease Control and Prevention (CDC), more than 100 million adults in the US are obese, with more than 22 million adults having severe obesity. This is expected to increase, with a recent study projecting more than 250 million Americans will be overweight or obese by 2050. The CDC also reports that in 2022 over 70 million adults in the US reported having a disability.

For many of these people, a visit to the doctor's office can be very stressful and receiving adequate care can be challenging due to accessibility issues.

Patient/Caregiver Comfort

A growing number of healthcare systems are adopting a patient-centered approach to care that emphasizes the importance of understanding the needs, preferences and values of patients. The approach is helping bring a sharper focus on patient comfort and the impact it can have on the quality of care provided, as well as clinical outcomes. For instance, the level of comfort for patients can potentially influence their anxiety level and help ease white coat syndrome to avoid possible misdiagnosis of hypertension.

There is also growing attention being directed toward the comfort and well-being of caregivers, driven by the shift toward value-based reimbursement programs and a greater awareness for moving to a Quintuple Aim focus. It is becoming widely understood that members of care teams need to be comfortable in their environment in order to provide efficient patient care.

This increased emphasis has placed staff well-being and satisfaction at the same level of importance as clinical outcomes, patient satisfaction, and efficiency and profitability when it comes to optimizing the delivery of care.

Evidence-Based Design Can Enhance Accessibility Efforts

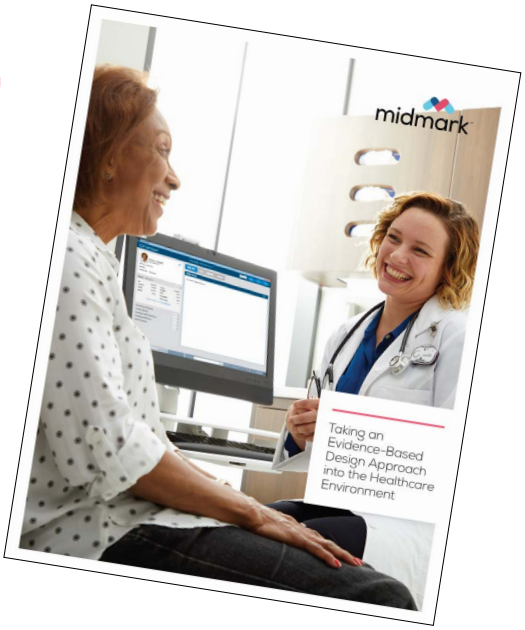
As greater attention and focus are being placed on the interaction between patients and caregivers at the ambulatory point of care, evidence-based design (EBD) is being seen as a means to help guide accessibility efforts.

Taking an EBD approach when establishing or renovating the point of care ecosystem elevates the strategic importance of equipment, exam room layout and design. It ensures decisions are based on proven research and best practice, linking them directly to desired clinical outcomes.

An EBD approach helps healthcare organizations and their design partners create a healthcare environment conducive to achieving better outcomes through enhanced patient/caregiver experience, standardization and interaction at the point of care. This is an important part of designing for accessibility.

By focusing on how built environments can influence patient well-being and outcomes, EBD helps create an inclusive healthcare environment. Ultimately, these design principles promote equity in healthcare, ensuring all individuals, regardless of their physical, cognitive or emotional challenges, can access care in a safe, supportive and efficient ambulatory environment.

For tips on implementing an evidence-based approach to the design of care environments, read the Midmark white paper, "Taking an Evidence-Based Design Approach into the Healthcare Environment."



Components of Greater Accessibility in Exam + Procedure Rooms

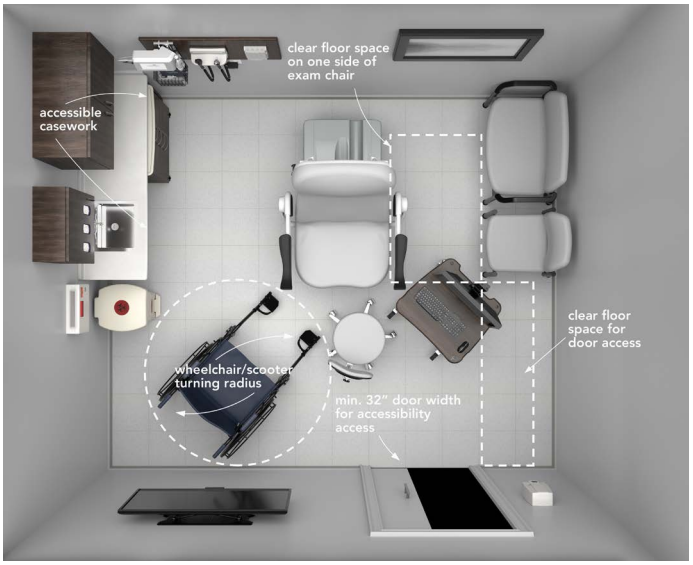
Traditionally, much of the focus around ensuring accessibility to care has been on the ambulatory care facility as a whole. Many of these concepts and components are best practices in building design and construction projects across industries. These can include accessible parking, ramps and spacious hallways and waiting areas free of clutter.

However, there is a growing need for architects and designers to understand how best to ensure accessibility in exam and procedure rooms; especially since these areas are where the majority of the patient-caregiver interaction occurs. The equipment and furniture contained in the rooms, and how they are configured to enhance workflow, can have a big impact on accessibility at the point of care.

A well-designed exam or procedure room accommodates a range of physical, sensory and cognitive needs, creating an environment that is both functional and welcoming for patients and healthcare professionals. The following are how components of exam and procedure rooms can help increase accessibility.

Exam/Procedure Room

The layout and configuration of the exam/procedure room can significantly impact accessibility. First and foremost, the size of the room needs to be large enough to comfortably accommodate the patient, physician and staff, and allow exams and procedures to be properly performed.



The minimum size for an ADA-compliant accessible exam room is approximately 10 foot x 10 foot and provides a 60-inch diameter area to accommodate wheelchair turnaround, as recommended in guidelines of the ADA. These guidelines also recommend providing space between exam/procedure chairs and the walls to allow staff to assist with patient transfers and positioning, and ensuring the entry door to the room has a 32-inch minimum clear opening width with the door open 90 degrees.

Often, the challenge is meeting these guidelines while also ensuring the room is configured with the right equipment and furniture needed to provide accessible and quality care.

Examination/Procedure Chairs

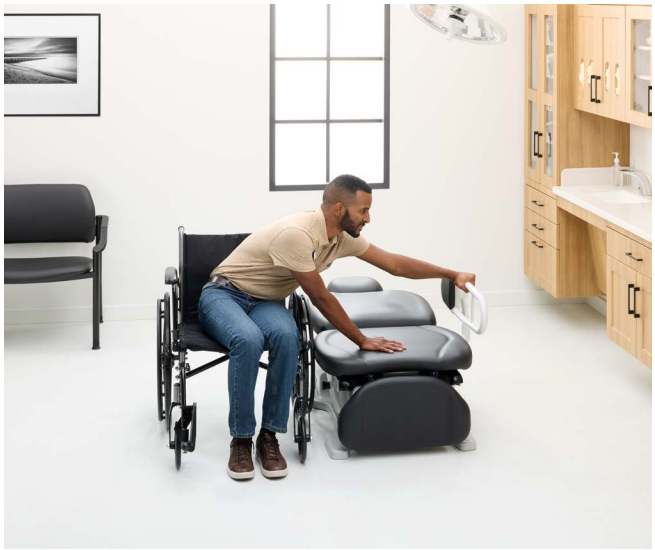
The focus of any exam/procedure room is the examination/procedure chair as it is the place where caregivers truly deliver care to patients—it touches nearly every patient. This is why it is important that an accessible chair be a central fixture of any ambulatory care environment.

As mentioned previously, the US Access Board recently released a new standard providing design criteria for exam and procedure chairs. The key ruling states examination and procedure chairs should have a low-seat-height of 17 inches or lower, with a high-seat-height of 25 inches or higher while also providing four additional transfer positions located between the low and high transfer positions.

The seated transfer surface should be at minimum 21 inches wide and 17 inches deep with compliant transfer supports that support entry, exit and repositioning from either side of the chair. The width of the chair base should be no more than 26 inches wide, and where stirrups are provided, leg supports that provide a method of supporting, positioning and securing the patient's legs should also be provided.

These requirements increase the patient's comfort, protect their dignity and help physicians conduct a more thorough and accurate exam or procedure, as well as helping facilitate more informed diagnoses and treatment decisions.

It is worth noting the US Access Board found the Midmark 626 Barrier-Free® Examination Chair, which reaches a low height of 15 ½ inches, as the only chair currently on the market that complies with and exceeds the new standard. With the addition of the Midmark® 631 Procedure Chair, Midmark is now the first and only manufacturer in the market to have both a procedure and examination chair that comply to the US Access Board standard.



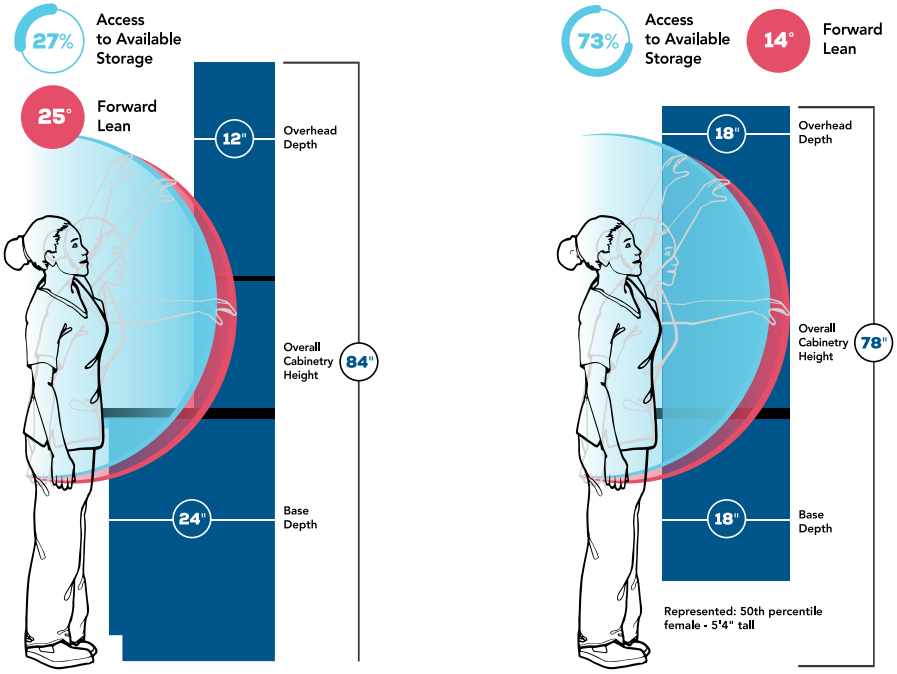
Cabinetry

The right cabinetry can help provide greater accessibility for patients and the care team. When designing for the clinical space, the size of room and equipment as well as the types of mobility devices used by patients and staff must be taken into consideration. In cabinetry, accessibility includes front-approach sinks with low countertops, proper under-counter leg-space and appropriate reach to faucet, soap and towels.

For care teams, cabinetry designed specifically for the staff that uses it can greatly increase accessibility and help maintain an ergonomically friendly environment.

According to the Bureau of Labor Statistics, 76% of healthcare workers are female, while the average height of females in the US is just under 5 feet 4 inches. The typical cabinetry found in clinical environments is not designed for them. Today with traditional 84-inch tall cabinetry, the staff often needs to use stools or other devices to access supplies on upper shelves.

Cabinetry designed for average-height healthcare workers enables caregivers to easily reach frequently accessed supplies without unnecessary bending, stretching or constant overreaching, which can contribute to bodily stress and strain. Synthesis® Wall-Hung Cabinetry incorporates ergonomic principles and is designed for the caregivers who interact with cabinetry in the medical space, creating a better caregiver experience at the point of care.



Workstations

Mobile workstations enhance accessibility by enabling caregivers to be more present with patients during visits and supporting seamless patient/caregiver interactions. This helps reduce the communications barrier between patients and caregivers. Caregivers and staff can input information, access patient records or review diagnostic data without leaving the patient's side. This allows them to keep the patient experience and interaction top of mind.

Mobile workstations are height adjustable to ensure a strain-free and comfortable care experience for members of the care team. They allow proper, ergonomically correct working positions so as not to cause unnecessary strain on caregivers' back, shoulders or neck. Fully adjustable arms allow monitors to be easily positioned for both sitting and standing postures. For instance, Midmark® Mobile Workstations are the only mobile workstations ergonomically designed to support the needs of nearly all users, from those with heights in the 5th percentile (5-foot female) to the 95th percentile (6-foot-4-inch male)—and everyone in between.

Fabrics, Colors + Lighting

One area of accessibility often overlooked when designing for new builds and renovations is the idea of creating sensory-friendly healthcare environments for neurodivergent patients. Neurodivergent individuals, especially those on the autism spectrum, may often experience heightened sensitivities to stimuli. Design elements that can help minimize incidents of sensory overload can include soft dimmable lighting, soft neutral color schemes and soft fabrics and upholstery.

Equipment Providers can be a Valuable Resource

Equipment providers can be a valuable resource for architects and designers during ambulatory care projects. A number of benefits can be realized by engaging with the equipment provider early in the design phase and including them as part of the cross-functional team. This can be especially valuable when the provider has clinical design experience and expertise.

Whether it is a new facility build or a renovation, a knowledgeable equipment provider that has broadened its offerings beyond equipment can bring a deeper understanding of how design, equipment and layout can enhance greater accessibility in the clinical space. These point of care ecosystem experts can provide insight into how the right design, configuration and equipment can increase overall accessibility of the room.

Their in-house design consultation experts can work directly with project architects, contractors and interior designers to help ensure facility design and room configurations align with equipment and furniture needs, and desired workflows and accessibility goals are achieved. They can also help ensure the point of care is compliant with relevant accessibility standards and regulations.

Engaging the equipment provider early in the process provides a valuable opportunity to explore new options and technologies that are available. It can also help eliminate costly instances where necessary changes or different equipment or furniture has to be shoehorned into a project after the design or construction has been completed.

For instance, Midmark provides a variety of benefits to the design process through its Midmark Live Design process. In this setting, the design team often solves potential issues previously undetected and offers options and critical insight to help resolve the issues. Midmark also has a team of EDAC-certified (Evidence Based Design Accreditation and Certification) designers and planners available to offer assistance and expertise from the initial design process through the finished installation and beyond.

Designing for accessibility in a primary care environment is not just about meeting legal obligations but about creating a healthcare system that is fair, inclusive and responsive to the needs of all patients. Ensuring accessibility in exam and procedure rooms enhances patient care, improves the healthcare experience, and ensures individuals, regardless of ability, can access the services they need to live healthy lives.

For more information, visit the point of care design section of the Midmark website.

Designing better care.®

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