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Taking an  
Evidence-Based  
Design Approach  
into the Healthcare  
Environment



Taking an evidence-based design (EBD) approach when establishing or renovating the point of care ecosystem ensures decisions on equipment, exam room layout and design are based on proven research and best practices. This white paper from Midmark explains why this approach is important and offers tips for healthcare organizations adopting EBD in ambulatory care.

# A Proven Approach With Results

In today's clinical environment, taking an evidence-based approach to decision-making is helping to bridge the gap between what is known (or best practice) in medicine and what is done by healthcare providers. Clinical decisions are made through a delicate balance of research-based evidence, clinical expertise and the values/preferences of the patient.

When it comes to determining treatment plans or discussing the delivery of health services, caregivers understand the importance of taking an evidence-based approach. This integration of clinical expertise, patient values, available scientific research and evidence into the decision-making process helps caregivers provide logical, proven care with better outcomes. Practicing evidence-based medicine also offers care providers a way to achieve the four pillars of the Quadruple Aim in healthcare: patient experience, population health, cost of care and provider satisfaction.

As healthcare continues to evolve into a value-based care model, there is growing opportunity to extend the evidence-based approach beyond delivery of services and treatment decision-making to other areas of healthcare. One area that is primed and ready for this change is the design and layout of the healthcare environment in ambulatory care.

Taking an evidence-based design (EBD) approach when establishing or renovating the point of care ecosystem elevates the strategic importance of equipment, exam room layout and design decisions. This approach helps healthcare organizations and their design partners create an ambulatory care environment conducive to achieving better outcomes through enhanced patient/caregiver experience, standardization and interaction at the point of care.



IMPROVING PATIENT OUTCOMES, PATIENT SATISFACTION +  
STAFF ENGAGEMENT WHILE REDUCING COST + WASTE

# Evidence-Based Design



Once viewed as an “unconventional approach” to healthcare facility design just a few short years ago, EBD has quickly become an accepted approach to hospital design. As greater attention and focus are being placed on the interaction between the patient and caregiver at the ambulatory point of care, we are now seeing EBD being more frequently used in clinics and exam rooms.

To achieve the best possible outcome, healthcare organizations are making a concerted effort to base any critical decisions around patient/caregiver experiences and interactions on credible research. Industry research continues to show the impact healthcare facility design, exam room configuration, clinical equipment and technology can have on outcomes. As a result, industry best practices continue to be developed to support an EBD approach that harmonizes with and enhances a patient-centered approach.

Much of the gains made by EBD can be attributed to the Center for Health Design, which has been championing the approach since the early 90s. According to its website, the center “advances best practices and empowers healthcare leaders with quality research that demonstrates the value of design to improve health outcomes, patient experience of care, and provider/staff satisfaction and performance.”

The strength of the EBD approach lies in the simple fact that it links equipment and design decisions directly to desired clinical outcomes. Important decisions are based on available research that supports the best possible outcomes—there is no relying on assumptions or misconceptions.



# Tips for EBD Adoption

As healthcare organizations look to cement the EBD approach as a critical process in the design and layout of new and existing facilities, here are four important tips that will strengthen those efforts.

## 1. Conduct the Research

What a healthcare organization wants for its ambulatory care facility may not actually meet its needs. Decisions are sometimes based on preconceived assumptions or points of view—or how other facilities have been designed and built.

Proven, available third-party research can be further bolstered by conducting observational research within your facilities. Talking with patients and caregivers about their experiences and observing them as they move through the existing space can show you how actual experiences vary from perception.

## 2. Invest in Technology

There is new technology available in the market that can help provide the data needed to make evidence-based decisions during redesign or new-build projects. These technologies can provide greater insight into exactly how the space is performing and identify opportunities for improvement.

For instance, technology such as a real-time locating system (RTLS), which has been used in hospitals for many years, can be used with patient flow software to gain valuable understanding of actual patient wait times, patient-caregiver interaction times, and the utilization of equipment and rooms. RTLS can tell you if processes/workflows are being followed, how often caregivers are interacting with patients and technology, and if there are accessibility issues with the equipment, rooms or facility.



### **3. Balance Experience with Efficiency**

As healthcare organizations gather and consider evidence, it is important to take a balanced approach for any decisions. Any changes should enhance the experience while also providing functionality and efficiency. For instance, deciding to use a specific exam chair because it is comfortable can be a good step. Also ensuring the functionality of the chair meets the needs of the space and will not negatively impact efficiency is even better.

### **4. Remember the Equipment Manufacturer**

Everyone understands the importance of having a cross-functional team in place when starting a healthcare environment redesign or build project. This includes care team leaders and patient advocates, as well as architectural and construction professionals. However, one important player that is often left out of the process is the equipment manufacturer.

An effective equipment manufacturer can provide a deep understanding of how design, equipment and layout can impact interactions, experiences and outcomes in the clinical space. They can also help conduct mock-up exercises that offer valuable insight into the best design, configuration and equipment for the desired space.

Of course, not every manufacturer would make a great addition to the team. An equipment manufacturer who has broadened its offerings beyond equipment to become experts on the entire point of care ecosystem will provide value. They will understand the importance of integrating processes, equipment and caregivers within a design that helps increase efficiency and optimize workflow while raising the quality of experiences and care provided. Also, be sure to confirm they have EBD accreditation and certification (EDAC) experts on staff.



An effective exam room design with the right layout and equipment is vital to providing the quality of care that is expected and desired by today's healthcare consumers. Adopting an EBD approach gives healthcare organizations the framework for ensuring design decisions are based on real information, rather than assumptions or misconceptions. Following the four suggestions provided in this paper will help healthcare organizations successfully implement an evidence-based approach to the design of their care environment.



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