

A LITTLE ATTENTION TO DESIGN  
CAN GO A LONG WAY TOWARD IMPROVING  
WORKFLOW AND PATIENT SATISFACTION.

# Efficient Office Design FOR A Successful Practice

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**E**stablishing a practice is a challenge in today's health care market. To survive in this competitive environment, you need to create the best possible setting for you, your staff and your patients. This includes not only architecture and aesthetics, but also technology and furnishings. All of these can affect your efficiency and workflow, which will have a significant impact on your overall productivity. These factors can also affect how comfortable patients feel in your practice, which could influence how likely they are to return to you for future care.

This article will explain how design elements can optimize efficiency and patient care. Some suggestions are more applicable to those starting from scratch or making large-scale changes, but even if construction isn't on your agenda, these tips can help you improve your current setup.

## First impressions count

Patients will form their first impression of your office when they enter the waiting room. The current design trend for medical practices is to create a waiting room with an inviting atmosphere similar to a hotel lobby. The optimal size for a waiting room depends on a few factors, including the number of physicians in the

practice, visit volume and the overall efficiency of your practice. For example, if you perform many procedures or other services that tend to produce longer visits, you may not have as many patients cycling through the waiting room and may not need as much space. However, if more patients cycle through the office in shorter time intervals, you will likely need a larger waiting room because you will have more patients waiting at one time. If you're unsure how much space you need for your waiting room, consult with an architectural and design firm that understands the mechanics of patient flow and office efficiency.

Your patients' comfort should be your priority when you design your waiting room. The seating capacity must be ample, but be careful not to overcrowd your space. The area should provide coat hangers and storage for umbrellas and hats. If your patients typically wait more than a few minutes before being called into the exam room, provide up-to-date educational or entertaining reading material. When selecting furniture, choose individual chairs. Patients tend to be reluctant to share a couch, so couches can waste valuable sitting room. Be sure to purchase some armless chairs to accommodate pregnant, obese or disabled patients. Your furniture should be durable – hotel grade, if possible. Select fabrics



create a glare. However, many designers advise using incandescent lighting in waiting areas because it is inviting and provides a more hospitable feel. Whatever kind of lighting you choose, make sure the waiting room is well lit for safety and for comfortable reading.

that will be comfortable for patients while complementing the decor of the room.

The decor in your waiting room should be soothing. Because decor is subjective and styles change from year to year, think twice before following the latest style. Choose colors that are cheerful, natural and inviting. Paints or wallpaper prints with warmer tones are good choices. Also, keep in mind sound absorption when choosing accessories for the waiting room. Carpets, drapes, upholstered furniture and acoustic ceiling tiles can all maximize sound absorption for a quieter room.

The lighting in the waiting room also has a considerable impact on the look and feel of a practice. Fluorescent ceiling lights distribute an even level of lighting throughout a room, and they are ideal for basic utility and patient safety, especially for the visually impaired. As long as you have diffusers over fluorescent lights, they shouldn't

### How much exam room space do you need?

When deciding how many exam rooms your practice needs, consider the types of visits you typically have and both the number and types of procedures you perform most often. An inadequate number of rooms can result in inefficient patient flow and less-than-optimal productivity. Too many rooms will result in wasted overhead.

The typical family physician requires three exam rooms and one procedure room, but this can vary in multi-physician or multispecialty practices depending on the number and types of procedures performed. Physicians can easily share a procedure room if they do not perform a large number of procedures.

When designing an exam room, begin with a little more space than you initially need to allow for the addition of technology later. The optimal size for an exam

## AN INADEQUATE NUMBER OF ROOMS CAN RESULT IN INEFFICIENT PATIENT FLOW AND LESS-THAN-OPTIMAL PRODUCTIVITY.

room is 10 feet by 10 feet, although these dimensions can vary slightly without affecting the function of the room. Each room should have enough space to comfortably accommodate you, a nurse or assistant, your patient and at least one family member. Think of wheelchair accessibility, too. Smaller exam rooms – 8 feet by 8 feet, for instance – make it difficult for wheelchair users to navigate in the room. It's good to have space for a 60-inch diameter wheelchair turn, per the Americans with Disabilities Act (ADA) guidelines.

In addition to exam rooms, consider having a smaller, separate room where a nurse can measure vital signs, height and weight before the actual exam. This is especially helpful during busy times and can decrease the amount of time patients have to spend in the exam room. Be sure this room provides sufficient privacy for the patient. It will need to have an area where the patient can lie down or sit down so the nurse can take blood pressure or collect other diagnostic information using an electrocardiograph, spirometer or Holter monitor.

Having such a room can also make it more feasible to use PC-based diagnostic devices for obtaining vital signs and other data. These are particularly useful if you have or are considering purchasing an electronic health record (EHR) system. Many of these devices now integrate patient data with the patient's electronic record, eliminating the need to import this data through a secondary interface,

thereby improving efficiency and reducing transcription errors.

### The ideal exam room

The design of an exam room is important no matter how many rooms you have or how big they are. Because privacy is paramount, make sure the door opens into the exam room rather than into the hallway and is hinged in such a way as to swing toward the exam table. This will shield the patient on the exam table from the view of those outside the room. The ADA requires that the door be positioned approximately 18 inches from the corner, but these requirements could vary from region to region. (See the diagrams on the opposite page for a sample floor plan of an exam room.)

The layout of the room should be flexible to meet changing needs, but all the exam rooms in the practice should be designed and stocked identically so that you and your staff do not waste time searching for supplies. The placement of cabinets, sink, chairs, desk, exam table, lights and waste receptacles is critical for ensuring that patient visits run smoothly. Consider how the quality, design and location of each of the following exam room elements can affect the patient visit:

**The exam table.** A wide variety of exam tables are available depending on your budget, the procedures you perform and your patient population. Because your patients will likely spend the majority of their time in the exam room on the exam table, make sure it is comfortable and easy to adjust. For example, a table that can lower to 18 inches from the floor makes it easy for pregnant, post-op or disabled patients to get onto the table without putting excess strain on themselves, you or your staff. These “barrier-free” tables also decrease your chance of back injury from

■ Your waiting room should be welcoming to patients, with comfortable seating, ample lighting and soothing decor.

■ Exam rooms must be large enough to accommodate wheelchair users; 10 feet by 10 feet is the optimal size.

■ Designing and stocking your exam rooms identically will save you time during patient visits.

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### About the Author

Jon Wells is director of marketing for the medical products division of Midmark Corporation. He has worked in the health care industry for 16 years and has published several articles on practice efficiency and design. Author disclosure: Jon Wells discloses that he is employed by Midmark Corporation, a manufacturer of medical furniture and equipment.

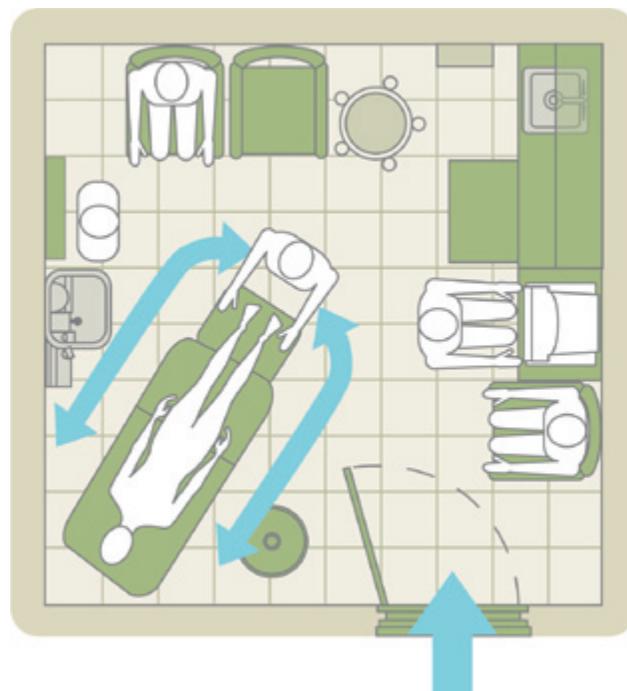
lifting patients onto the table and from bending over during exams.

Some exam tables are fully motorized, allowing you to adjust the height, foot and back sections, and they can tilt to achieve the Trendelenburg position. You can also find tables that feature pelvic tilt, removable tops, electrical receptacle, built-in pillow and positioning programmability. (See “Exam room furniture manufacturers,” below, and “What about used medical equipment?” on page 50 for information on vendors and products.)

To facilitate access to both sides of the patient, consider positioning the exam table at an angle in the room. Not only will this give you full access to the patient, but it also will create a barrier to deter the abuse of diagnostic devices that can occur when patients are left unattended and within arm’s reach of items mounted on the wall.

**Seating.** Your stool should be comfortable while also providing support for your back. You can find adjustable stools with an air-lift feature that provides some shock absorbency to prevent jolting your spine when you sit down. It’s a good idea to have two side chairs for your patient’s relatives or caregivers. You might consider a third chair if you have an EHR at a drop-down desk away from the exam table.

**Lighting.** The kinds of procedures and exams you perform will dictate the type of



## EXAM ROOM FURNITURE MANUFACTURERS

The following companies offer a variety of products for medical practices:

<b>The Brewer Company</b>	<a href="http://www.brewercompany.com">http://www.brewercompany.com</a>	888-Brewer-1 (888-273-9371)
<b>Hausmann Industries Inc.</b>	<a href="http://www.hausmann.com">http://www.hausmann.com</a>	888-Hausman (888-428-7626)
<b>Midmark Corporation</b>	<a href="http://www.midmark.com">http://www.midmark.com</a>	800-Midmark (888-643-6275)
<b>United Metal Fabricators Inc. (UMF)</b>	<a href="http://www.umf-exam.com">http://www.umf-exam.com</a>	800-638-5322

## BECAUSE YOUR PATIENTS SPEND THE MAJORITY OF THEIR TIME IN THE EXAM ROOM ON THE EXAM TABLE, MAKE SURE IT IS COMFORTABLE AND EASY TO ADJUST.

You can reduce your risk of back injury by using an exam table that is adjustable in height and a stool with an air-lift feature.

EHR users should place desktop computers on a desk-height extension of the counter and tablet computers on a rolling stand.

lighting you need. Lighting should provide precise positioning with shadow control and proper intensity. Lights are available on caster bases or they can be mounted in a variety of ways. Halogen exam lights can be more expensive than incandescent lights and can get very hot in operation, but they use bulbs that last longer and are more energy efficient than incandescent bulbs.

**Cabinetry.** Consider using 18-inch-deep cabinetry to provide storage while maintaining as much floor space as possible. (For comparison, normal kitchen cabinets are 24 inches deep.) Modular cabinetry is preferable because it allows you to choose the right amount of storage space for your needs, eliminating trips outside the exam room for equipment and supplies. It can also make it easier to take your cabinets with you if the practice moves.

The cabinetry should be durable, easy to clean both inside and out, and made with medical-grade materials. Cabinetry designed specifically for health care facilities uses steel and plastics to provide added durability. You can also choose from a variety of colors to coordinate with the paint or artwork in the room.

**Diagnostic systems.** Most offices use a diagnostic system that includes basic instruments needed for physical diagnoses, such as an otoscope, ophthalmoscope, ear speculum dispenser, sphygmomanometer and thermometer. It's convenient to mount these systems on the wall for easy access. If you mount the systems in the same place in each exam room, you and your staff won't need to adjust your routine each time you go into a different room.

**EHR.** Desktop computers are still more popular than laptops for practices that use EHRs. They are best positioned on a desk-height extension of the counter, away from the sink. If you use a tablet computer, consider placing it on a shelf nearest to the point of care or on a rolling stand for greater mobility and to ensure the necessary eye contact with the patient.

**Dressing area.** If your practice requires a dressing area in the exam room, some options include cloth curtains, partitions on wheels or even double-door dressing cubicles that mount to the wall. A dressing area will provide a little extra privacy in case you or a staff member enters the exam room unexpectedly.

**Waste receptacles.** The waste receptacle should have a foot-operated lid and be seamless so that it can retain waste within the can itself. Place it under the wall-mounted diagnostic devices where it is not in the way during the exam but is still easily accessible.

### WHAT ABOUT USED MEDICAL EQUIPMENT?

If buying new equipment is not an option, a number of outlets sell used medical equipment. When looking for used equipment, consider factors such as whether it will be compatible with new technology and whether it complies with ADA requirements and other current regulations.

The obvious advantage of used equipment is that it is typically less expensive than new equipment. When researching medical equipment, carefully assess the seller's reputation and the equipment's quality. Look for extended warranties and refurbished equipment that has been tested by factory-trained technicians in accordance with manufacturer specifications. Be wary of unrealistic claims or online outlets that entice consumers to a storefront that may not be run legitimately.

### The rewards of good design

To run a successful practice, you must look for ways to improve practice processes, eliminate waste and give patients the best possible care. Careful planning and attention to design can help you achieve these goals. The suggestions outlined in this article can lead you to design improvements that will benefit your practice now and in the future. 

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