

# Office Design

David Kirschen and Sam Quintero

*Let us see these handsome houses where the wealthy nobles dwell.*  
Alfred, Lord Tennyson *Locksley Hall*

The image of a professional office and the eye care experience that patients expect to receive in many instances is crafted by the exterior and interior design of the office. Eye care professionals also appreciate the need for a state-of-the-art office that is not only current by the instruments within the practice but also by the need for attractiveness and efficiency of systems that the office design dictates. The discussion that follows is not meant to serve as an exhaustive review but rather as an initiating resource for all practitioners who are buying a practice, starting a practice, or redesigning an office for the first time.

The general public often forms an impression of a doctor's competence by the physical appearance of the exterior and interior of the office. As patients visit the office, their perception of the thoroughness of the examination can be strongly influenced by the interior decor and patient flow. These impressions can exert a significant effect on future visits and on referrals of new patients. For this reason, it is important for the practitioner to become knowledgeable in the areas of office design and patient flow, interior design, and aspects of remodeling and construction, adherence to building codes and federally mandated requirements such as the Americans with Disabilities Act (ADA).

Most optometrists will need the services of qualified professionals in the building trades to complete an office remodeling project. Finding the right people can be the biggest challenge. Architects, designers, contractors, and decorators should be chosen in the same manner as any advisor—by reputation in the community and by a trusted referral if possible. An interview to discuss the scope of the project, the cost, and the time involved should assist in making an intelligent selection. It is always wise to thoroughly check the references of any advisors and if possible, to obtain first-hand knowledge of the quality and promptness of their work. Specific questions to ask include the following: “Was the cost estimate on target?” “Was the work completed on time?” “Were you satisfied with the work?”

The location of a practice contributes to the image it projects to the public. For example, an optometric practice located in a medical building may project an image of excellence in medical care, but not necessarily one in which

designer eyewear would be available. On the other hand, an optometric office located in a mall projects an image of retail sales, in which products are important and “eye care” may be incidental. An optometry office in a stand-alone building or in a strip center could project either or both images, depending on the design, signage, lighting, and other factors that may contribute to the image of the office.

The practitioner's ability to fashion the exterior of an office depends largely on where the practice is located. In the case of a freestanding building, much can be done to positively influence the exterior, including the use of extensive landscaping, signage, and lighting (Figure 13-1). When the practice is located in a professional building or a shopping mall, these options might not be under the optometrist's direct control. However, design concepts that are visible to the public from the exterior of the office should be discussed during negotiation of the lease for inclusion, as well as considerations for a build-out allowance.

It is important to develop a floor plan that allows the practitioner and staff the opportunity to work effectively and efficiently. There are basically two alternatives when designing a floor plan:

- The patients are placed in examination rooms and the doctor moves between rooms.
- The doctor is placed in a room and the patients are moved to him or her.

The following describes several considerations involving patients, doctors, and staff that must be considered when designing an efficient floor plan (this is not an exhaustive list):

- Minimize the number of steps traveled each day by the staff
- Provide for wheelchair access
- Check-in and check-out areas should be separated
- Create “holding places” for patients waiting for dilation or contact lens services or patients wanting to speak to staff about personal financial matters
- Avoid bottlenecks in patient flow

The best time to consider the floor plan is when selecting a new office location. Sometimes a practitioner might be the first tenant in an open space and can have the luxury of constructing interior walls to suit the needs of the practice.



**FIGURE 13-1** The 3-D signage, landscaping, and lighting give the exterior of this building a modern appearance. (Courtesy Dr. David Kirschen, Brea, CA; photo courtesy L. Ernie Carrillo.)

In other cases, interior walls are already in place and might have to be used “as is” for economic reasons. An established practitioner might wish to remove walls and add new walls to improve the floor plan and office flow.

There is value to visiting as many practices as possible before designing a new office or making extensive renovations. Photographs should be taken, if allowed, as well as plenty of notes and a sketch of the floor plan. Actual measurements of existing rooms can give a better understanding of space requirements. Many eye care management journals feature photographs of and stories about office designs, and these can serve to stimulate design ideas.

## DESIGN OF THE OPTOMETRIC OFFICE

Office design is a very specialized field, and at times, professional advice is invaluable. A description of how the office is to be perceived by patients will provide very valuable information to design professionals. For example, is the office to convey a professional, upscale atmosphere or a homey, laidback, comfortable atmosphere? Whatever the theme, it should be carried throughout each room in the office. The design consultant can then offer advice consistent with the message the practitioner wants to provide to patients visiting the office and offer design suggestions for each room, consistent with the intended message.

There are three types of design services available. This first is from a professional design consultant who specializes in optometric offices. After hearing the practitioner’s comments and evaluating the office space, these designers offer a number of services for a fee. They usually offer a “turn key” service, including design services, building contractors, furniture and displays, paint and carpet service, and so on. Alternatively, they may offer design services only, and the practitioner will have to hire a general contractor to arrange for the appropriate trades to execute the design plan.

The second kind of design service is from frame display companies. They will visit the office and help design (or redesign) the optical area. They understand patient flow, lighting, color coordination, and optical displays and furniture. Some

companies charge a fee for the design service, which often includes computer-scale drawings of the floor plan and color three-dimensional (3-D) renderings of the final layout.

The third type of design service also is from frame display companies. Some offer a free floor plan design for an office. They generally speak with the practitioner on the telephone to assess needs and often will ask for photographs and a dimensional layout of the office as it currently exists. They then create a computer scale drawing of the new design for review, which sometimes includes 3-D renderings. This free service is offered in the hopes of earning future business such as new frame displays and optical furniture.

Before developing an office design, it is important to have a conception of the services and functions to be provided and performed in the office. A conceptual plan will include the minimum requirements of the space, including the approximate size of each room and the function to be performed in that room. Because optometry is such a specialized field and the particular needs of optometric offices are not generally known, this chapter covers key ideas to consider on a room-by-room basis.

## Vestibule or Lobby

A pleasant first impression is created when the front entrance to a building opens into a lobby or even a small vestibule. This area generally serves as a weather buffer to prevent shocks of cold, heat, or rain from entering the reception area of the office (Figure 13-2). Lobby space also can serve as a convenient area for patients waiting for transportation. Tile makes an excellent floor covering for this space, and replaceable mats provide a surface to absorb dirt and moisture.

## Reception Area

The reception area should immediately welcome visitors in comfort (Figure 13-3). This area is commonly called a *waiting room*, but this term has a negative connotation because no one likes to wait. A reception area is a place where



**FIGURE 13-2** This entrance lobby to a professional office provides a comfortable and safe haven from inclement weather. (Courtesy Gailmard Eye Center, Munster, IN.)



**FIGURE 13-3** Reception area with an open appearance that is easily visible to the receptionist in the business office. It also provides easy access to the frame selection area through a door. (Courtesy Dr. David Kirschen, Brea, CA; photo courtesy L. Ernie Carrillo.)

patients are received. Something as simple as the name given to a room can help set the atmosphere in the office. The reception room should be kept very clean and be updated at least every 3 to 5 years.

The size of the reception area is dictated by the method of scheduling appointments and the number of patients who will be there at one time. Because pupillary dilation is now a standard procedure, a sizable reception area might be needed if dilated patients must be seated there. A secondary, inner room also can serve as a “holding” area, reducing the number of people who must be accommodated in the reception room and decreasing the size of the area needed. The reception area also must accommodate the family members or friends who might accompany the patient. The seating in the reception area should be visible to the receptionist from the business office desk or counter. In small offices, the receptionist can have a desk, rather than a built-in counter, in the reception area.

Anything that can make the reception room unique and special is desirable, if it is done in good taste. Considerations, such as an aquarium, well-cared for plants, unusual windows with attractive exterior views, or a fireplace, can set the practice apart from others and can become a form of internal marketing. Other unique ideas that can be incorporated into a reception room include bookcases with large print and regular print reading materials; a TV and DVD player with cable news and weather stations or videos on eye care topics or children’s cartoons; a display of antique eyewear; or a refreshment bar that might offer coffee, tea, or soft drinks. It is desirable to have a restroom available for patients immediately adjacent to the reception area so that office staff members do not have to be interrupted by patients seeking toilet facilities.

The choice of seating is a very important consideration and must provide durability while offering comfort and safety for handicapped and elderly patients. Single seating is preferable

to couches, since strangers may not like to sit together. Lighting should be adequate for comfortable reading and should remind patients of the important relationship between good lighting and sharp acuity. A coat rack or closet is a nice addition and should be located in view of the receptionist. A bulletin board for announcements to patients is a useful accessory. A special corner or other built-in environment can be reserved for children, with a table and chairs, as well as toys and children’s reading materials (Figure 13-4); such an area demonstrates that the practice welcomes children. The reception room should provide a clear path from the front entrance doors to the receptionist’s desk. A tile or vinyl floor covering makes a practical walkway to the front desk, and the rest of the reception area can be carpeted.

Some offices combine the reception area with the frame display area. In this way, patients who are waiting to be seen can “browse the optical” and get ideas for their spectacle purchases. This arrangement also offers an excellent opportunity for patient education and internal marketing.

## Business Office

The business area, as the name implies, is where the business of the office is handled (Figure 13-5). This area should be easily accessible to patients and give the image of being open and available. An adjacent door to the reception room can provide for security and privacy. It works well if the check-in and check-out areas are kept separate. One area should be used for patients checking in and the other for patients paying bills or making future appointments. It is important that patients have privacy when making such arrangements and that office procedures respect the confidentiality of patient information in accordance with the provisions of federal law (see Chapter 16). Care should be given to the location of telephones so the receptionist can view the reception room and still have some privacy for phone calls.



**FIGURE 13-4** An area for children, located in the right corner of the reception room. It contains age-appropriate toys and reading material and a TV/VCR for entertainment. (Courtesy Dr. David Kirschen, Brea, CA; photo courtesy L. Ernie Carrillo.)



**FIGURE 13-5** This business office is open and easily accessible to patients. The check-in (long counter to the right) and check-out (smaller counter to left of post) areas are separated, and the office has a good view of the frame selection area for security. (Courtesy Dr. David Kirschen, Brea, CA; photo courtesy L. Ernie Carrillo.)

The business office usually contains file cabinets or shelving units for current patient files. It might be necessary to install an additional remote filing area when the number of files exceeds the front office capacity. A system to purge older files must be devised for patients who have not returned in a certain number of years. Countertops and cabinets should be provided to allow for storage of office supplies.

The typical office equipment located in the business area includes a telephone, computer and printer, fax machine, credit card device, and photocopier. Wall-mounted shelving units can provide an excellent visual display of contact lens solutions and other eye care supplies. Having such displays near the front desk and available at the time of final billing will result in convenience purchases. The telephone system generally can incorporate an intercom to the other rooms in the office and can even be used as a light-signaling system. An additional light-signal panel can be mounted in the business area to show which examination rooms are occupied by individual staff members. In smaller offices, it is convenient if the business office permits a view of the examination rooms. This method can be more efficient than light-signaling systems because the receptionist can simply look to see whether doors are open or closed to determine when the examination room is available for the next patient.

The business area, along with most of the office, will typically be carpeted and have a suspended ceiling; both factors help absorb sound and provide a nicer working environment. A short-weave, commercial-grade carpet is best, allowing for easy cleaning and for office chairs and stools to roll easily. The color and texture chosen should not show traffic patterns and soil. Fluorescent lighting, within the suspended ceiling, is most often used in offices because it is cool and cost-efficient. Various grid covers or lenses

are available for fluorescent fixtures. The use of spotlights provides additional light where needed for emphasis and can add style to the office.

## Administrative Area

It might be desirable in larger office spaces to have an additional business area that is not accessible or visible to patients. This area allows behind-the-scenes work by office staff, including the numerous billing and mailing activities that are part of a successful practice. These activities can include the preparation and mailing of statements, recall notices, service agreement reminders, and other direct mail pieces. Additionally, this room can be used for receiving deliveries and mail and can provide a private area for the telephone activities of the staff, including calls to patients about past due accounts and the use of telephone marketing techniques. This room can have a conference table, as well as an additional computer, telephone, postage meter, and photocopier.

## Data Collection Room

The data collection room is used for preliminary testing, usually by an optometric technician (Figure 13-6). In some practices, it can be used as a special procedures room for procedures such as visual fields and retinal photography. A smaller examination room with a minimum size of 10 × 12 feet could serve this purpose. It may be desirable to have more than one data collection room, since the use of many instruments requires testing for significant periods. It is not likely that a practice will duplicate some of the computerized automated instruments that are necessary for data collection, so it might be preferable to conduct the automated tests in the first room and then move the patient to the second room for the remainder



**FIGURE 13-6** Data collection room that contains visual field unit and autorefractor despite its small size (6 x 10 feet). The table can be used for preliminary testing and the sink area for contact lens insertion and removal. (Courtesy Dr. David Kirschen, Brea, CA; photo courtesy L. Ernie Carrillo.)

of tests. This opens the first room for the next patient. A sink is useful in the data collection room so that technicians can wash their hands and contact lenses can be removed and reinserted. There are various instrument delivery tables available, ranging from automated rotating tables to individually adjusting tables for each instrument. Thought should be given to the tests that will be performed in this room so that room size and other aspects of design can be planned. For example, light switches should be easily reached by a technician seated at the instrument. If the room is to be used for measurement of visual acuity, the placement of mirrors or other devices should be considered. Box 13-1 lists typical procedures that could be performed in a data collection room.

## Examination Room

Multiple examination rooms should be considered for all but the smallest practices. Various methods for making the examination room more efficient include the refractive duo concept, in which the patient end of the room is wider than the end of the room where the target is projected. Often, two rooms can be designed so that they are adjacent to one another. Mirrored examination rooms have become very popular, however, and provide a nicer look than long, narrow lanes.

A room as small as 8 × 12 feet can be made acceptable for refractive distances of 20 feet with the use of refractive mirrors. These mirrors can be set up in a very effective manner and should not be regarded as too difficult or too confusing. If space permits, an ideal examination room might be 10 feet wide × 20 feet long. These dimensions provide a large, open feeling and offer plenty of room for chair-side technicians and visitors who might accompany the patient. It should be noted, however, that the examination chair will be at least 2 feet from the back wall of the room and that the refractive distance consequently will be close to 18 feet. The acuity chart can be adjusted to compensate for this test distance.

Examination rooms should be designed specifically for use by a right-handed or left-handed practitioner, and individual preferences should be taken into consideration (Figure 13-7).

### BOX 13-1

#### Procedures for Data Collection Rooms

- Case history
- Visual acuity (far and near)
- Noncontact tonometry
- Autorefraction
- Keratometry
- Lensometry
- Telebinocular visual skills
- Visual field testing
- Retinal photography
- Color vision
- Stereopsis
- Blood pressure measurement
- Corneal topography



**FIGURE 13-7** Examination room equipped with appropriate instrumentation and containing the doctor's library. Efficient design allows for storage of drugs and a large writing surface. There also are numerous visual aids to facilitate communication with patients. (Courtesy Dr. Lawrence Thal, Kensington, CA.)

It is important to have a sink near the examination chair so that hands can be washed and solutions and contact lenses can be handled. An excellent concept is the use of the refraction desk, which serves as a writing surface and storage area near the sink and vanity. Handheld diagnostic instruments are placed in recharging wells within this refraction desk, and an inclined drawer stores the trial lens tray. Placement of a manual chart projector on the refraction desk allows easy operation by the practitioner, especially if a small rearview mirror is incorporated so that the practitioner does not have to turn around to see the chart. Remote-control devices allow the projector to be mounted at the appropriate place in the room. The refraction desk can be wired electrically to control wall outlets so that various instruments can be controlled from the refraction desk. The room lights can be dimmed or turned off by controls on the refraction desk if they are prewired. It is somewhat complex to use a dimmer on fluorescent light fixtures, so it might be more practical to turn them off and use the reading light on the instrument stand as the only light for low illumination.

A clean, professional look is desirable for examination and treatment rooms, although some decoration is needed to prevent a too-sterile look. Subdued and textured wall coverings, tasteful art work, or a display of professional certificates are some decorating possibilities. Windows are not desirable in the examination room because of the need for lighting control, but if they already exist in the room, they can be covered with blinds or drapes. Some practitioners use windows as an adjunct to trial frame testing at a far distance.

## Contact Lens Room

A special area reserved for contact lens fitting is a must for most practices (Figure 13-8). The contact lens area can serve as a laboratory and an inventory room that is only accessible to staff



**FIGURE 13-8** Contact lens room (right), stocked with necessary solutions for lens care; the technician can be seated opposite the patient when instruction or training is needed. (Courtesy Dr. David Kirschen, Brea, CA; photo courtesy L. Ernie Carrillo.)



**FIGURE 13-9** This optical dispensary's carpet accents and glass displays imply that high-quality materials are offered and that there is careful attention to detail. (Courtesy Eye Designs, Colleagueville, PA.)

members, or it can include a dispensing and patient education room that would be used to instruct patients in contact lens use. As a laboratory, this room should have counters with convenient electrical outlets for instruments such as a radiuscope, lensometer, shadowscope, and microscope. A modification unit and sink also should be located in this room. With increased use of disposable contact lenses, larger areas are needed to store inventories. Having most lenses in stock is regarded by some practitioners as a significant practice asset, although the trend toward doctor-controlled shipment from the manufacturer directly to the patient may reduce this need.

Special dispensing counters with built-in sinks, tissue dispensers, and individual mirrors create an excellent environment for multiple- or single-patient training by the technician. Other considerations for this room include a dedicated video recorder and television for educational videos about contact lenses and storage for educational brochures and fitting agreement forms.

## Optical Dispensary

A large area within the office should be devoted to frame displays and optical dispensing because this area often produces a large portion of a practice's income (Figure 13-9). A small dispensary is 200 square feet or smaller; a medium to large traditional dispensary is 500 to 1,000 square feet; and a super-optical dispensary runs from 2,000 to 3,000 square feet. Wall space is typically used to mount frame display units or glass shelves for frames. Windows are desirable if sunlight can be controlled. Professional designers can be of great help in designing and furnishing this more retail-like area. Companies that manufacture and sell optical displays are eager to assist the doctor in choosing a theme for the dispensary and recommending the displays and furnishings that will achieve the look.

A lens design center can be incorporated into the dispensary. This center directs attention to ophthalmic lenses and optional lens features before frames are selected. A video frame-viewing center is another concept that can be included. These computer-assisted frame-display systems take a digital picture of the patients' face and electronically superimpose frames of different sizes, colors, and shapes on the picture. This gives the patient an opportunity to see what he or she will look like with frames that are not in stock. A special area or individual booths for delivering and adjusting glasses should be considered because they provide some privacy and reserve the use of dispensing tables for frame selection purposes. Special sections showcasing frames for men, women, and children are fairly standard, but special areas for designer eyewear, sports eyewear, and brand name sunglasses are more unique (Figure 13-10). Lighting deserves special planning to highlight displays and make skin tones most attractive. Track lighting works well for dramatic highlights but might need to be supplemented with fluorescent lights and daylight. Indirect lighting reflected off ceilings or walls can be quite pleasing. Skylights are a popular architectural detail.

It is important to consider computer work stations in the dispensing area to complete eyewear orders and to complete the financial transactions with the patient rather than bottlenecking the front desk area. When designing the work stations, the origination of the computer and electrical supply lines must be considered.

Many practices provide an entrance to the optical dispensary that is separate from the entrance to the professional practice. This feature allows a separate identity for the dispensary and allows more aggressive marketing than a practitioner might be comfortable with if it were strictly part of the practice. A separate entrance can prove quite functional for patients stopping in to pick up eyewear or to have glasses adjusted.



**FIGURE 13-10** Lens design center (far left wall) within an optical dispensary that is used for discussion of lens material options with patients. Stand-alone cases (in rear) can be used to highlight specialty items such as sunglasses or sports frames. (Courtesy Dr. David Kirschen, Brea, CA; photo courtesy L. Ernie Carrillo.)

### Optical Laboratory

The optical laboratory can range from a small repair center to a full-service laboratory with finishing and surfacing equipment (Figure 13-11). Square footage can range from a minimal 60 to 80 square feet up to 1,000 square feet for a large laboratory.

Attention should be given to the special requirements of water supply and waste drains, electrical outlets, data outlets, and voltage supply, as well as good lighting and sound control. Exhaust venting to the exterior of the physical plant may also need to be considered when using certain finishing materials that produce odors.

The laboratory design should be based on the logical flow of the steps in the lens fabrication process. Ample counters at a 36-inch height for standing are needed, and base cabinets and wall cabinets provide important storage. If certain tasks require seating, the use of a barstool is effective, but an opening must be left between cabinets as a knee/leg hole. Certain services, such as computerized lens design, might need a special section of the counter at a desk height of 30 inches.

Special care, such as the installation of an exhaust hood, must be taken in the tinting area to provide adequate air ventilation. The walls and floor of this area will inevitably have dye splashed on them and for that reason, can warrant special protection.

### Practitioner’s Private Office

It is recommended that practitioners have a private office that can be used for conducting the business aspects of managing a practice (Figure 13-12). It must be remembered that business administration is a vital component of a successful practice and that not all of the optometrist’s time is spent examining patients. As the owner of a small business, the practitioner must have a space to perform paperwork and meet with staff



**FIGURE 13-11 A**, The portion of the optical laboratory used for frame adjustment and repairs; tools hang on a magnetic strip and thus are out of the way of the frame warmer and ultrasonic cleaner. **B**, The area used for verification of ophthalmic materials. (Courtesy Dr. David Kirschen, Brea, CA; photos courtesy L. Ernie Carrillo.)



**FIGURE 13-12** Doctor’s private office, with a desk used for discussions with patients and table and chairs to accommodate several persons. (Courtesy Gailmard Eye Center, Munster, IN.)

members and business associates. If space is limited, an area within an examination room can be fitted with a desk and chairs and serve as the practitioner's office.

## Conference Room

A luxury in most large offices is the use of a dedicated conference room (Figure 13-13). This room can have a long conference table that accommodates all staff members. The room can include an area for a slide or overhead projector, as well as special felt-tip marker boards. The inclusion of a conference room will encourage regular and more productive staff meetings.

### Staff Lounge

If space permits, a staff lounge or lunchroom is a nice addition to the office. This room can provide a lunch table, sink, refrigerator, microwave oven, telephone, and perhaps a television. If space is limited, the staff lounge can double as a conference room for staff meetings and industry presentations to staff.

## Storage Rooms

Most practitioners, like homeowners, will agree that one can never have too much storage space. Unfortunately, with the high cost of commercial real estate, revenue-producing activities must take precedence. In planning an office, practitioners should consider the need for convenient storage of patients' records, office financial records and invoices, patient educational brochures, contact lens solutions, extra displays for the dispensary, office supplies and stationery, cleaning supplies, and maintenance tools.

## Office Size

The space requirements needed for an office will depend on numerous factors, but in general, a small practice is defined as needing less than 1,000 square feet (Box 13-2) of office space, a



**FIGURE 13-13** Conference room used for staff meetings and education. (Courtesy Gailmard Eye Center, Munster, IN.)

### BOX 13-2

#### Room Requirements for a Small Office

- Reception room:  $12 \times 15 = 180$  square feet
- Business office:  $10 \times 12 = 120$  square feet
- Examination room:  $10 \times 12 = 120$  square feet
- Laboratory:  $8 \times 9 = 72$  square feet
- Dispensary:  $10 \times 20 = 200$  square feet
- Hallway and bathroom: 100 square feet

Total = 792 square feet

moderate-sized practice needs from 1,000 to 2,500 square feet (Box 13-3), and a large practice would need as much as 6,000 square feet (or more) (Box 13-4). Individual room sizes may vary depending on individual needs, but these figures provide approximate indications of the space needed for small, moderate, and large practices. The size of the office can be estimated by the scope of services to be offered by the practice. All instrumentation and furnishings have minimum footprint

### BOX 13-3

#### Room Requirements for a Moderate Office

- Reception room:  $10 \times 20 = 200$  square feet
- Business office:  $10 \times 15 = 150$  square feet
- Data collection room:  $10 \times 12 = 120$  square feet
- Examination room:  $10 \times 14 = 140$  square feet
- Second examination room:  $10 \times 14 = 140$  square feet
- Contact lens room:  $10 \times 18 = 180$  square feet
- Finishing laboratory:  $14 \times 18 = 252$  square feet
- Dispensary:  $20 \times 30 = 600$  square feet
- Private office:  $12 \times 12 = 144$  square feet
- Hallways, storage, and 2 bathrooms: 300 square feet

Total = 2,226 square feet

### BOX 13-4

#### Room Requirements for a Large Office

- Lobby:  $6 \times 12 = 72$  square feet
- Reception room:  $20 \times 25 = 500$  square feet
- Business office:  $15 \times 20 = 300$  square feet
- Administrative area:  $12 \times 14 = 168$  square feet
- Office manager's office:  $10 \times 12 = 120$  square feet
- Two data collection rooms:  $10 \times 12 = 120 \times 2 = 240$  square feet
- Four examination rooms:  $10 \times 20 = 200 \times 4 = 800$  square feet
- Contact lens laboratory:  $8 \times 20 = 160$  square feet
- Patient education room:  $12 \times 16 = 192$  square feet
- Dispensary:  $30 \times 60 = 1,800$  square feet
- Finishing laboratory:  $20 \times 20 = 400$  square feet
- Private office:  $10 \times 20 = 200$  square feet
- Staff lounge:  $10 \times 20 = 200$  square feet
- Hallways, storage, and 3 bathrooms: 600 square feet

Total = 5,752 square feet

requirements; combining this with the space occupied by the patient and staff(s) providing the service can help define the minimum requirements of the space for each instrument and service function. It is also important to consider the flow of traffic within the office and in being compliant with ADA requirements.

## Building and Remodeling

It is strongly recommended that the practitioner meet with an architect or designer as early as possible to adequately plan for any remodeling or new office construction. Most towns and cities have building codes and zoning ordinances, and it is best to check with the town's building inspectors before performing any construction, no matter how minor.

Parking plays a vitally important role in how an office is perceived by the public. Businesses that have easily accessible parking will have a better chance of reaching a high level of success. One must anticipate growth in the planning of any office and that includes adequate parking. Doctors' offices typically have a sizable allotment for parking if there is a controlling city ordinance (usually based on square footage such as 1 space per 100 square feet).

Special considerations for wiring exist when remodeling or planning new construction. Planning must include wiring for burglar alarm systems, telephone systems, computer systems, Internet access, light-signal systems, stereo music systems, and intercoms. When working with architects and designers, the best way to approach planning meetings is with a written list of the special needs of the office. Designers can help recommend some aspects of construction, such as size requirements, lighting and heating and air conditioning needs, plumbing and electrical specifications, and so on, but they must know individual needs, which are very specific to optometry.

## Bid Process Considerations

It is customary after plans are drawn to accept bids by contractors. Develop a list of contractors from recommendations from friends, colleagues, and the builders' association in your community. It is best to select a general contractor familiar with eye care facilities. One should not be surprised if the landlord in space being leased takes an interest in the selected contractor. The contractor will need to know if the landlord has specific requirements as they relate to their facility and the relationship of the structural considerations, potentially impacting adjacent tenants. An architect can serve as a construction manager—a person who generally serves as an advisor—and can eliminate the need for a general contractor. With the use of a construction manager, subcontracts with individual specialty contractors, such as plumbers and electricians, can be made directly, possibly saving some of the administrative fees for a general contractor. With this arrangement, the practitioner is the general contractor. It should be noted, however, that a general contractor may be quite necessary for a busy practitioner who might not have time to coordinate and supervise

all of the contract work. Many general contractors also serve as designers and can provide a complete “turn key” job. Regardless of the specific approach taken, it should be expected that construction may take longer and cost more than the amount originally anticipated.

## CONCLUSION

The image of professionally appearing offices and the experiences that eye care practitioners are seeking to provide with office designs will have a significant impact on the competitive edge of the office. Building and designing the office of your dreams should be an exciting and rewarding experience. Consequently, planning carefully and becoming knowledgeable in the areas of office design and patient flow, interior design, and the various aspects of remodeling and construction, as well as adherence to building codes and federally mandated requirements, requires that the eye care professional have more than a passing awareness of office design.

It is also important to realize that the general public forms an impression of a doctor's competence by the physical appearance of the exterior and interior of the office. As patients visit the office, their perception of the thoroughness of the examination can be strongly influenced by the interior decor. These impressions can exert a significant effect on future visits and on referrals of new patients. The success of the practice may depend on the design of the office.

## ACKNOWLEDGMENTS

The authors of this chapter in the first edition of *Business Aspects of Optometry* were Neil B. Gailmard and John Rumpakis.

The authors of this chapter in the second edition of *Business Aspects of Optometry* were David Kirschen and John Crane.

## BIBLIOGRAPHY

- Baldwin BL, Christensen B, Melton T: *Rx for success*, Midwest City, Okla, 1983, Vision Publications.
- Bennett H: Not your typical doc in a box, *Rev Optom* 138 (3): 53–54, 56, 2001.
- Bennett I: *Management for the eye care practitioner*, Boston, 1993, Butterworth-Heinemann.
- Bethke W: A new way to look at your sign, *Rev Ophthalmol* 6 (9): 58–61, 1999.
- Bostick DB: Dispensary relocation: creating separate retail and clinical environments, *Optom Today* 1(4): 19, 1993.
- Bursett L, Nguyen K, Bleything WB: Your reception area: what do patients want?, *Optom Economics* 7(3): 25–29, 1997.
- Cousounis H: A design for the times revives a fading practice, *Rev Optom* 135(7): 33–34, 1998.
- D'Addono B: Five offices where form meets function. Here's what designers like to see when they work on an office, *Rev Optom* 131 (10): 45–46, 48, 1994.
- D'Addono B: Keep your patients out of each other's space, *Rev Optom* 132 (3): 37–38, 43–44, 1995.
- D'Addono B: Don't let the roof cave in on your dream project, *Rev Optom* 133(9): 33–36, 1996.

- D'Addono B: Make your office user friendly... for you, *Optician* 133(8): 51–54, 1996.
- D'Addono B: Optical illusions: live large in a small office, *Rev Optom* 134 (9): 61–62, 64, 1997.
- D'Addono B: Go with the flow and your practice will grow, *Rev Optom* 135 (3): 51–59, 1998.
- D'Addono B: Maintaining production during construction, *Rev Optom* 135 (11): 39–40, 42, 1998.
- D'Addono B: This redesign fits, without the glitz, *Rev Optom* 135 (9): 41–43, 1998.
- Del Pizzo N: Blueprints: success by design, *20/20* 21 (9): 59–60, 62, 1994.
- Harvey D: Window of opportunity, *Optom Management* 31(11): 69–71, 1996.
- Kreda SH: Design of the times, *Optom Management* 31(2): 44–46, 1996.
- Kreda SH: Moving on up: how to convert new office space into an optimum optometric setting, *Optom Management* 32(6): 43, 1997.
- Kreda SH: Big plans for a small office, *Optom Management* 34(12): 45, 1999.
- Kreda SH: Are you practicing in a bowling alley?, *Optom Management* 35(9): 43, 2000.
- Kreda SH: Room for one more, *Optom Management* 35(12): 56–57, 2000.
- Lee J: How to see more patients—and more of your family, *Rev Optom* 137 (9): 69–77, 2000.
- Lyon I: The professional touch: window displays, *Optician* 217 (5701): 20–21, 1999.
- Lyon I: Small, but perfectly formed, *Optician* 217(5697): 47–48, 1999.
- McDermott GK: Solve your parking problem, *Rev Ophthalmol* 6(9): 62–64, 66, 1999.
- McKercher TP: Efficiency by design, *Admin Eyecare* 10(1): 30–32, 2001.
- McNelis K, Franciscus C: Make your optical more child-friendly, *Rev Ophthalmol* 7(7): 100–101, 2000.
- Murphy J: Sprucin' up the old salt mine, *Rev Optom* 137(3): 53–55, 2000.
- Petersma J: How I opened cold on \$20,000, *Optom Management* 32(6): 14–19, 1997.
- Press LJ: Building a new office: it's not the impossible dream, *Optom Management* 33(5): 33–40, 1998.
- Russell B: Dynamic frame displays, *Optical Prism* 15(3): 22–40, 1997.
- Smith A: Optimum lighting systems for offices, *Optician* 216(5678): 34–36, 1998.
- Smith A: Lighting for optometric and ophthalmic practices, *Optician* 217(5690): 34–37, 1999.
- Whitby G, Brogan R: Diary of a new practice: part 7. Six months on, *Optician* 211(5548): 30–31, 1996.
- Wrench J: Practice design in today's market place, *Optom Today* 3(4): 38, 1995.

#### Websites

- [www.optometric.com](http://www.optometric.com). Online version of *Optometric Management magazine*.
- [www.revoptom.com](http://www.revoptom.com). Online version of *Review of Optometry magazine*.