The architectural axiom “form follows function” has no better application than in developing the ideal dental treatment room. Regrettably, many of us have been limited in our universe of experience to the dental student’s perspective of needing our “stuff” around us. Our educational example of dental practice places the assistantless student dentist in the center of the operatory universe. We therefore gather all dental instruments, materials and related gizmos within our reach, creating a mind-set that frequently follows us into practice. Equipment purchase decisions too often are based on the “our-stuff-around-us” student approach rather than the practice of four-handed dentistry with skilled auxiliaries.

Ideally, the instruments and materials necessary for treatment should be delivered and retrieved by an assistant without the dentist having to shift focal length or leave the finger rest. To have an unobstructed view of the oral cavity, the assistant should be seated approximately six inches higher than the dentist and with his or her thigh paralleling the adjacent upper arm of the patient. This allows the assistant to see over the indirect vision or check-retracting hand of the dentist while maintaining proper posture.

The dental instruments are most conveniently delivered from a primary work area directly in front of the assistant. In this location, a single dual-function dental unit can serve as the primary work surface for instrument delivery as well as serving both the dentist and assistant with handpieces, three-way syringes and high- and low-volume evacuators, thereby maximizing efficiency regardless of whether the practitioner is right- or left-handed. This single, dual-function dental unit can be either a cart or an arm-type, with all utilities necessary delivered from the utility wall located behind the patient (Figure 1).

The utility wall also can deliver the periapical radiograph machine from directly behind the patient’s head—the ideal location for taking radiographs whatever the patient’s position. A view box or digital radiography monitor in this location allows the dentist to refer to a film easily during treatment without raising concerns in the patient’s mind. With the assistant normally facing this direction, the monitor mentioned above is in the prime viewing area for the assistant as well.
dentist from the dental chair or side wall, saving the cost of an additional delivery unit and related utilities, while maintaining flexibility to accommodate either a right- or a left-handed operator. This arrangement also keeps clear the circulation lanes on either side of the chair for delivery of portable items of technology that may be too expensive to place in each room.

**CIRCULATION**

A primary goal in planning the treatment area is to provide for unencumbered flow of treatment personnel. Too often, treatment rooms are planned with only one entrance/exit, thus "trapping" the assistant or the dentist once the patient chair is reclined. This decreases efficiency and increases stress. In the ideal design, access to and from the operatory is available on either side of the utility wall, allowing the dentist and assistant unimpeded passage regardless of the patient chair’s position (Figure 2). For instance, when it is time to examine a patient who is being seen by the hygienist, the dentist is able to leave and return to the treatment room without disturbing the patient and without having to reposition the patient chair.

**ORIENTATION**

By orienting the patient chair away from the treatment corridor, patients do not have to worry about facing other patients while their smile is compromised. As an added benefit, this arrangement conceals the majority of the dental equipment from the patient’s view when he or she is in the treatment corridor, entering the treatment room and seated in the treatment room. The patient’s attention is directed outward through windows located at the foot of the chair to a controlled view that prevents people from looking into the treatment room from outside. By locating a ceiling-mounted video screen off-center as shown in Figure 3, the patient can view an intraoral video, compact disc or digital video disc patient education sources, videotapes, television or selected images from the practice management monitor (mentioned previously) both when seated upright and when fully reclined during treatment.

Secondary work surfaces with sinks and trash drops for soiled towels and gloves are located symmetrically along the utility wall.
side walls of the treatment room, resulting in a plan that again accommodates both right- and left-handed operators with ease. By using a preset concept for instrument delivery from a central sterilization area, the design keeps the operatory cabinetry to a minimum. Drawers are needed only for limited supplies such as individually packaged back-up instruments (in case one is dropped), additional cotton supplies beyond those delivered with the preset concept, prescription blanks, patient education diagrams and brochures, and headphones. The operatory sinks are located at the far end of the side counters so as to allow the operators and the patient to exchange greetings face to face while the operators are washing their hands and donning gloves. This sink location also allows a secondary work surface to be located within easy reach of the assistant.

The degree of visual and acoustic separation between patient chairs varies with the individual practitioner’s philosophy. An open bay, while ideal for a pediatric or an orthodontic practice, may be totally inappropriate in other practice situations. The degree of desired privacy, therefore, is variable, depending on the extent of the walls between patient chairs. In any case, the basic floor plan remains unchanged.

**YOUR FAVORITE ROOM**

When all treatment rooms are designed and equipped identically as described in this article, the full spectrum of oral health care can be provided in each and every room. No longer will the dentist rely on a favorite room for those long, involved procedures. Every treatment room becomes a favorite room, allowing your receptionist greater scheduling flexibility.

**CONCLUSION**

Appropriately implemented, these concepts of treatment room design will allow you to produce as much as you choose, while decreasing your stress. Your treatment rooms will become the primary assets of your office, for the duration of your practice.