Is ‘semiprivate’ always an oxymoron?

Not if the “zoned semiprivate room” makes headway

by Tonia E. Burnette, RA

The current movement toward all-private inpatient rooms has been largely cheered by patients, caregivers, and designers. But is a 100% private configuration necessarily the best plan for all units? Do semiprivate rooms still have a place in the healthcare industry’s future? And is “semiprivate” always an oxymoron, or can we develop new inpatient room models that provide more benefits than current models?

This question increases in importance with the new AIA and AHA 2006 Guidelines for the Design & Construction of Hospital & Health Care Facilities dictating that all new construction comprise all private rooms “unless the functional program demonstrates the necessity of a two-bed arrangement.” In an era of spiraling healthcare costs, nursing shortages, and increasingly sick patient populations, pragmatists recognize that for many inpatient units, a two-bed arrangement can indeed be a functional necessity.

Just as private rooms are a necessity for the proper care of some patients, rooms that accommodate more than one patient are necessary for others. Higher acuity patients who require closer monitoring and more bedside care benefit from the greater proximity of staff achieved through a semiprivate arrangement. The program for delivering nursing care to intermediate care patients typically requires a 4:1 patient-nurse ratio. However, it does not follow that traditional semiprivate rooms—essentially double rooms—are a viable solution for these patients. Accessibility and visibility to the patients, while maintaining their privacy and safety, necessitates a new design.

Marshall Craft Associates, Inc. (MCA), a Baltimore-based architecture and planning firm specializing in healthcare design, has developed a new patient room design—the “zoned semiprivate room”—that marries aspects of each traditional room type to deliver an alternative. Zoned semiprivate rooms offer each patient an individual toilet/shower room, a dedicated HVAC supply and...
return, and a personal zone that provides greater visual and acoustic separation than a traditional semiprivate room (figure 1).

Many inpatient units would benefit from the inclusion of some zoned semiprivate rooms on an otherwise private floor. Zoned semiprivate rooms are intended to complement, not replace, private rooms. They address the problem that all-private units have: becoming too large and spread out. MCA recommends including zoned semiprivate rooms in combination with single rooms to allow a high standard of care within a more manageable space.

A critical evaluation of specific criteria important to patients and hospital operations allows a comparative analysis of each room type. In each case, the draft criteria for intermediate care units found in the AIA and AHA 2006 Guidelines for Design and Construction of Hospital and Health Care Facilities are used for consistency (figure 2).

**Hospital Operations Issues**

Patient access/standard of care. The staff’s distance from patient beds affects how quickly they can respond when called. In this way, a traditional semiprivate room has an advantage. The typical corridor length is only eight feet per bed, and a nurse has to walk only 150 feet to access four patients from the satellite station. Contrast that with private rooms, which typically have 15 feet of corridor per bed and require a nurse to travel 235 feet to reach four patients. Zoned semiprivate rooms fill a median position: They use eight feet of corridor per bed and require a nurse to walk 185 feet to provide care for four patients.

Clear floor area per bed also affects how easily nurses access patients and bedside equipment. Zoned semiprivate rooms come out ahead, with 215 square feet per bed, as opposed to 180 square feet for private rooms and 150 square feet for double rooms. Moreover, the clear floor areas in zoned semiprivate rooms do not overlap. Nurses can get to both sides of each patient without disturbing the other, and caretakers can place equipment at both beds without having to share space.

Staffing efficiencies. With a national nursing shortage and an aging nursing population, staffing efficiencies are a serious concern for...
hospitals. As discussed above, nurses and other providers have to travel farther to provide care for a patient in a single room than for a patient in either kind of semiprivate room. Support areas in all-private units are correspondingly farther apart. Therefore, it takes longer to reach all the patients on a rotation and forces the staff to walk much farther over the course of a shift.

Moreover, nursing staff can observe no more than two patients at a time from a satellite nurses' station located between private rooms. They can see up to four patients and their monitors from a single station located between semiprivate rooms of either kind, depending on whether curtains are pulled (figure 3). It is important to note that in a zoned semiprivate room, a patient's curtain cannot block the nurse's view of the other patient, and staff can more quickly perform quick visual checks of patients' conditions.

Space requirements. Zoned semiprivate rooms again come down in the middle in this category. Gross square footage per bed and shower/toilet area breaks down as follows: private rooms = 325 square feet; traditional semiprivate rooms = 230 square feet; zoned semiprivate rooms = 305 square feet. All-private units simply require more space, and more space equates to more dollars spent, both in initial outlay and in long-term facility cost.

**Figure 3:** View of a right-side room with two patient beds and monitors visible from the satellite nurses' station.

**Patient Issues**

Privacy. Double rooms are not ideal for privacy since it is hard not to notice the other patient’s treatment. Zoned semiprivate rooms enhance privacy levels with dedicated individual zones created by separate toilet/shower rooms and curtains. The corridor-side toilet provides a visual and acoustic barrier between beds, while individual curtains give each patient control over the amount of privacy of the bed area, adjacent seating and floor space, and toilet room door (figure 4).

Infection control. Like private rooms, the zoned semiprivate room provides each patient with a dedicated HVAC supply and return and an individual toilet room, both of which are major facilities elements affecting infection control efforts. Traditional semiprivate rooms force patients to share these features, potentially spreading infectious agents.

Family areas. Because the second toilet room in a zoned semiprivate room uses the square footage that would typically be devoted to family areas, these rooms do not accommodate daybeds. They do, however, provide ample floor area for a bedside recliner. This is the one disadvantage zoned semiprivate rooms have to both private “universal” rooms and double rooms in which family areas are
Figure 4: View from the entry door of a zoned semiprivate room.

Figure 5: Window-side patient zone.
sometimes available for window-side patients.

Intangibles. Difficult-to-measure psychological issues such as perceived access to daylight and nursing staff also affect patient comfort. The zoned semiprivate room brings window-side patients closer to the window (six feet) and natural light than either the private or double room (both 12 feet, because of family areas), and provides a separate window for the corridor-side patient that cannot be blocked by the roommate’s curtain (figure 5). A clear view of a nurse at a satellite station reassures patients that their calls will be answered promptly (figure 6).

Summary of Evaluative Criteria
On most measured scales, zoned semiprivate rooms fall between private and traditional semiprivate rooms. They score higher on patient comfort issues than double rooms but lower than singles. The opposite is true of hospital operations issues; zoned semiprivate rooms are more efficient than private rooms but less efficient than doubles.

Overall Unit
A typical patient floor could have 20 private and eight zoned semiprivate rooms, for a total of 36 beds. Three work clusters supporting 12 patients each create an efficient patient/nurse ratio of 3:1 or 4:1 and reduce travel distance to support spaces (figure 7).

Two current MCA clients who have opted to include the recommended combination of private and zoned semiprivate rooms in new inpatient units anticipate using the rooms for intermediate care or as private VIP rooms as patient volumes allow.

Conclusion
An analysis of the zoned semiprivate room’s benefits for both patients and hospital operations helps hospitals make the case for including some of these rooms on their inpatient units. Zoned semiprivate rooms may not be the right answer for all inpatient units, but they provide a balance between hospital operations issues and patients’ concerns that give hospitals a necessary alternative.

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