



KEY POINT SUMMARY

OBJECTIVES

This study sought to compare overall trends in space allocation and differentiate how space was allocated between small, medium, and large units. The author reviewed 15 recently completed ICU units.

Comparison of Space Allocation in Recently Completed Critical Care Units

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*2011 | Critical Care Nursing Quarterly
Volume 34, Issue 4, Pages 282-289*

Key Concepts/Context

Critical care design has evolved from a series of curtained cubicles in a large open room to private rooms that occupy significantly more space. Nowhere is this move to larger spaces more apparent than when reviewing the adult critical care unit award winners of the Society of Critical Care Medicine, American Association of Critical Care Nurses, and American Institute of Architects/Academy of Architecture for Health annual design competition over the last 2 decades

Methods

This study compares the space allocation of 15 recently completed critical care units to document trends in overall space allocation. It also compares the allocation of space between small, medium, and large units.

Findings

The author reports that there are two factors that contribute to the overall departmental gross square feet per bed, the net-to-gross ratio that generally reflects the amount of circulation space on the unit, and the net square feet (NSF) or actual usable square footage. They both increased. The author concludes that the number of beds, net-to-gross factor, and net square feet per bed of the 15 units increased as the departmental gross square feet per bed increased. Further, the author states, within the net or usable square footage allocation, all categories of space increased progressively as the overall space increased, with the exception of direct patient care space and patient care support space categories. The author provides averages for preliminary benchmarks when evaluating existing critical care units or planning replacement units.



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Limitations

The findings are based on a small sample size and, therefore, are not conclusive. However, the author notes that they do represent several trends and can guide future critical care unit planning and identify areas for future study.

Design Implications

The author recommends two areas for additional study when planning for new units:

- Patient rooms size: The data shows significant variation in room size, and the room size did not consistently increase as the overall square footage increased. In fact, reports the author, there was a typical patient room of less than the recommended 250 NSF in each category, which may indicate that there is no consensus on optimal room size and/or the optimal room is still evolving.
- Net square footage per bed for direct patient care and patient care support: Although it seems obvious that that these two areas would be the same or consistently increasing in NSF per bed as units increase, the author's comparison of these 15 units did not bear this out. As with patient room size, the amount and balance of space between these two areas may be evolving. It will require additional study in future planning.

Reviewer's note: This is a well-constructed article by a registered nurse who is also an architect.