



KEY POINT SUMMARY

OBJECTIVES

The aim of this study was to gain some understanding of how non-designers and design professionals rank issues surrounding patient-room configurations.

A Multidimensional Framework for Assessing Patient Room Configurations

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Key Concepts/Context

The location of the bathroom in a patient's room affects everyone involved—patients, caregivers, and family. Yet little research exists about the effects of room variations.

Methods

This study tested a framework for the multidimensional assessment of variations in patient-room configurations. In May 2007, researchers used a list of issues and alternative room configurations to guide a four-step process during a 5-hour symposium of nondesigners (caregivers, patients, and their families) and design professionals. The researchers asked the participants to consider 23 issues (categorized within six domains of assessment): (1) patient safety, (2) staff efficiency, (3) circulation, (4) infection control, (5) patient considerations, and (6) family amenities. The investigators gave each participant a “placemat” that showed plan views of six room configurations that included: (1) three same-handed and three mirror-image rooms; (2) three outboard, two inboard, and one nested bathroom; and (3) three rooms with footwall bathrooms and three with headwall bathrooms. Fourteen experts from four institutions ranked the issues, discussed them in detail, and rated each room configuration against each issue on a 7-point suitability scale, and conducted an overall assessment of the six configurations.

Findings

The author reports that the participants found outboard bathroom locations were the most suitable, followed by nested and inboard configurations. Furthermore, the symposium participants rated configurations with patient bathrooms located on the footwall as more suitable than headwall locations. The author recommends, however, that the framework be used to determine a suitable room configuration in



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a specific context, rather than to identify configurations that will perform well universally.

Limitations

The framework needs more precise operational definitions and measures for each of the dimensions. In addition, empirical evidence is needed to supplement participants' subjective assessments, represented by numeric data. As a case-study, the author notes, the results should be considered true only for these symposium participants and for the six specific layouts they considered.

Design Implication

Primary stakeholders should be involved in the assessment of patient-room configurations during the design process. The framework provided in the study may be regarded as a point of departure for structured discussions between stakeholders and for the project-specific contextual assessment of alternative layouts. From this perspective, the framework offers a common vocabulary to structure the conversation between various stakeholder groups. Describing project expectations in a performance language that is commonly understood by all stakeholders could help identify a common vision at the beginning of a project, develop consensus among stakeholder groups regarding the set of dimensions that are high priority in a specific project, and identify the performance boundaries within which subsequent programming and design tasks will be conducted and assessed.