



## KEY POINT SUMMARY

### OBJECTIVES

The authors explored patients' perceptions of their immediate environment following a move to a newly designed; evaluated the differences in patients' perceptions of the more general hospital environment outside the ward and of staff-patient interactions; and hypothesized that more positive ratings on the dimensions of immediate environment, general hospital, and staff-patient interactions would be related to overall measures of patient satisfaction.

## Patient Satisfaction: Evaluating the Success of Hospital Ward Redesign

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### Key Concepts/Context

Numerous studies assess the quality of patient care through patient satisfaction measures, and others gauge the interaction between caregivers and patients, but physical facilities are also cited as an important contributor to the patient experience. This study considers a Canadian context, where standards differ from those in the US (e.g. semi-private and ward rooms at the time of the study) and patient satisfaction may be less intrinsic as a benchmark, due to the government structure of care. In this study, patient satisfaction is considered, relative to changes to the physical environment in a newly design Canadian internal medicine unit (the Ward of the 21st Century, or W21C). Findings indicated that enhancing the facilities of the patient care environment improved patients' overall perceptions of the quality of their hospital stay.

### Methods

The before-and-after-move surveys enabled investigators to use a pre-post non-experimental design to analyze patients' perceptions of their hospital experience. Twenty four patients who were scheduled to move from the traditional ward to the W21C completed the survey prior to the move. Twenty-one completed the survey after the transfer. The survey was based on an instrument developed by the Hospital Corporation of America using the patient judgment system (PJS). It was designed to assess hospital quality and had been previously tested for validity and reliability. Researchers selected 16 of the most relevant items from the 95-item survey. Grouped into four themes: patients' immediate physical environment (4 items), general hospital environment (5 items), staff-patient interactions (3 items), and overall satisfaction (4 items), composite scores were created by totaling the Likert-scale scores of all items within each of the themes. Following both patient



and staff transfer to the W21C over 2 days, the survey was redistributed to the same patients.

## Findings

In the new unit, patients rated (a) their rooms as being in better condition, (b) the supplies and furnishings as better, (c) the atmosphere as more restful, and (d) the facilities as providing more privacy. The ratings of the other items did not differ, including ratings of (a) quality of the food, (b) the rest of the hospital environment, (c) signs giving directions to find one's way around the hospital, and (d) provisions for family and friends. (These were not affected by a patient's transition from one ward to another.) Staff interactions with patients also did not vary between the two units. The relationships between overall satisfaction and the immediate environment, general hospital environment, and staff interactions were all moderate and positive in direction, but overall satisfaction with hospital stay in the traditional ward was correlated with patient perceptions of their immediate environment and the general hospital environment, while in the W21C, the overall satisfaction with hospital stay was correlated with patient perceptions of the general hospital environment.

## Limitations

Authors identified several limitations.

1. A convenience sample was used (although this was a key component to the study design).
2. The survey instrument had lower than desirable internal consistency (although the authors felt the data was still offered significant results).
3. Respondents also completed the follow-up survey very quickly - only 3-4 days after they completed the initial survey, creating the possibility of recall of responses. Investigators felt this timeframe was appropriate, however, as individuals are frequently discharged after just a few days. (The same-sample design was considered a priority.)

Additionally, the nature of the questions related to the environment was fairly generic, so there was little focus on the specific features included in the design.

## Design Implications

The authors state the findings demonstrate the benefit of implementing state-of-the-art hospital design features such as those seen in the W21C, even in light of the required additional capital investment. These features include:

- a predominance of private rooms,
- spacious areas for families and visitors,
- unique infection control design features,



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- an abundance of computer terminals for staff, and
- wireless communication capabilities.

The overall hospital environment is also an important consideration as it relates to patient satisfaction. The authors note their study does not provide any information on the economic considerations (e.g., balance of costs and benefits) associated with a policy of redesigning hospitals' physical environments to improve patient satisfaction.