



KEY POINT SUMMARY

OBJECTIVES

The objective of this study was to examine the perspectives of the patients and their families on the evidence-based design features of a heart center and compare them with their perspectives of the old heart center.

Patients and their families weigh in on evidence-based hospital design

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Key Concepts/Context

Literature indicates that design of a healthcare facility impacts quality of care, patient safety, patient satisfaction, staff satisfaction, and outcomes. Evidence-based design (EBD) is increasingly becoming a guiding principle in the design of new healthcare facilities. As research on EBD evolves and more hospitals and architects use EBD recommendations, it becomes imperative to consider the perspectives of patients and families. This research examined the perspectives of patients and families before and after they were transferred from an old heart care facility to a new one designed using EBD characteristics. This study found that patients were very pleased about the single-patient room and the features that it provided, the bathroom, the large windows, and the ability to control the thermostat.

Methods

This was a qualitative research that examined the perspectives of patients and families before and after moving to a new heart center. Interviews were conducted of hospitalized patients and their families and data pertaining to environment of care was collected from the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) and Press Ganey surveys. Data on the old facility was collected between January and September 2008, and from the new facility between January and October

2009. The old facility had 244 beds, of which 28 were coronary care and heart failure ICU beds, 108 were cardiothoracic surgical telemetry beds, and 108 were cardiac telemetry beds. The new facility had 395 beds, of which 34 were coronary care and heart failure ICU beds, 76 were cardiothoracic beds and 285 were telemetry beds. The sample consisted of 103 patients and families who were in the old unit and had been moved to the new unit. Cardiothoracic patients were not recruited because they typically have a length of stay less than 24 hours.



DESIGN IMPLICATIONS

Some design implications inferred from this study were:

Controls for lighting to be at patient's reach, preferably at bedside

In-room control for thermostat

Adequate accessible bars in bathrooms

Wall controls for switches to be labeled

Findings

The following findings pertain to what the patients liked about the new facility:

Single-patient rooms:

- Patients and families were most satisfied with the single-bedded room. It provided them with:
 - Privacy for themselves and eliminated the scope to be part of another patient's privacy
 - Easier to have conversations with families
 - The ability to adjust the thermostat
 - The ability to watch TV at one's own convenience
 - A sense of independence
- Rooms were quieter, larger, clutter was minimized, did not feel confining, and facilitated more family visits.

Bathrooms: Patients were pleased that there was:

- Reduced stress in going to the bathroom
- Motion-sensitive lighting
- Ability to take a chair into the bathroom
- Easy maneuverability in the shower

Family space:

- The provision of a space and furniture for resting was much appreciated by family members
- Larger windows: Patients expressed high satisfaction with the large windows in their rooms.
- Overall atmosphere: Patients found the new facility to be more homey, more relaxed, and more comfortable. They felt more independent here and had less anxiety and stress.

The following pertain to what patients did not like about the new facility: Light controls:

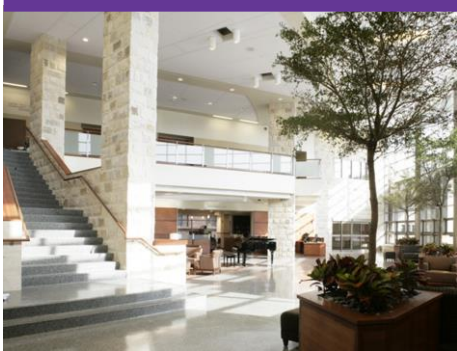
- All light controls were not accessible from the bed.
- Unlabeled light switches were a concern.

Bathrooms:

- Bathroom was a little farther away.
- Toilet needed an extra handicap bar.

Other:

- TV controls were difficult to use.
- Clock with no numbers was difficult to read.
- Rooms were quiet, but sounds from the noisy hallways carried into the rooms.
- Patients found the chairs very uncomfortable.



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- Internet accessibility and a bedside keyboard for patients, and a small refrigerator, wall calendar, and hand cleaner for family members would have been preferred.
- Visitors found navigation in the new facility a struggle, and that it involved too much walking.

With regard to changes in nurse care, patients reported that the nurses moved in and out of the new rooms very smoothly, were more attentive and responsive, and were in better spirits.

On analyzing the HCAHPS data it was seen that there were improvements in patient satisfaction when comparing the old and new units. Two significant findings pertaining to the physical environment were:

- The new facility was quiet 59.2% of the time; the old facility was quiet 34.5% of the time.
- The room décor in the new facility was considered to be pleasant 66.8% of the time; the old facility 28.9% of the time.

Limitations

The authors do not indicate that their study has any limitations. Some limitations associated with this study:

- There is no delineation of data collected from patients and families.
- Authors report collection of Press Ganey data, but it has not been reported.
- The authors do not report on patient data about the old facility.

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