



## KEY POINT SUMMARY

### OBJECTIVES

This study tried to connect two separately established areas of research:

- 1) the importance of communication in delivering quality of care; and
- 2) the relationship between physical design and communication in healthcare delivery.

### DESIGN IMPLICATIONS

ICCU's need to have decentralized communication stations. A centralized communication hub is essential for better medical staff performance.

## Influence of Nursing Unit Layout on Staff Communication and Interaction Patterns

Dutta, R.

2008 / *Doctoral Dissertation: Cornell University*

### Key Concepts/Context

The quality and design of the built environment has acquired a very significant role in improving patient and staff satisfaction in terms of overall healthcare experience. There is evidence from health care and beyond that working in teams enhances an organization's effectiveness, produce a better patient care both in terms of improving health delivery and staff motivation, and in superior patient outcomes. Communication among all team members of the groups is essential for the success of delivering healthcare services.

### Methods

A pre-post design intervention study was conducted to assess the impact of a decentralized vs. centralized nursing station layout of an ICCU on unplanned, opportunistic communication and interaction patterns among clinical care staff. The study was carried out through systematic observations of communication frequencies and behaviors within the ICCU both before and after its relocation to a new space. The research design also assessed the relationship between the location of different nursing pods on the new ICCU and informal communication patterns.

### Findings

- Significant reduction in interactions in the decentralized vs. centralized ICCU.
- Clear staff preference for a communication hub.
- No clear relationship between distance from the hub and frequency of interactions.



### The Center for Health Design: Moving Healthcare Forward

The Center for Health Design advances best practices and empowers healthcare leaders with quality research providing the value of design in improving patient and performance outcomes in healthcare facility planning, design, and construction, optimizing the healthcare experience and contributing to superior patient, staff, and performance outcomes.

Learn more at  
[www.healthdesign.org](http://www.healthdesign.org)

## Limitations

No limitations were identified in the study. The study is limited due to a small study sample and lacks generalizability since it has been conducted in only one location.