

# KEY POINT SUMMARY

#### **OBJECTIVES**

To assess the perceptions and attitudes of healthcare providers and parents regarding a neonatal intensive care unit's transfer from an open ward model to a private room model.

# NICU redesign from open ward to private room: A longitudinal study of parent and staff perceptions

Swanson, J. R., Peters, C., Lee, B. H., 2013 | Journal of Perinatology. Volume 33, Issue 6, Pages 466-469

## **Key Concepts/Context**

For the past 20 years, floor plans incorporating single-patient room designs have been growing in popularity, especially in the context of neonatal intensive care units (NICUs). The differences between private-room (PR) floor plans and open-ward (OW) floor plans have been thoroughly studied, with previous research showing how OW NICUs can limit privacy and generate other negative environmental effects for patients and family members. Further research is needed to better understand how PR floor plans in NICUs affect not only benefit patients and families, but also healthcare providers and other hospital staff members.

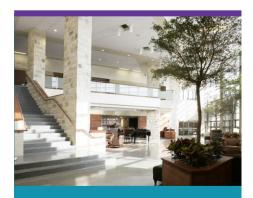
#### **Methods**

The neonatal unit observed in this study underwent a unit-wide transfer from an OW to a PR layout. Parents of NICU patients and healthcare staff answered surveys during a six-month period prior to the transfer, one month after the transfer, and eight months after the transfer. Survey questions outlined parent and healthcare provider perceptions of staff teamwork, development, privacy, overall safety, and communication efficacy.

#### **Findings**

Overall survey results from the three data collection periods revealed that parental perspectives on most variables remained unchanged between the OW and PR designs, implying that they were more focused on the status of their children as opposed to hospital functionality and design. Nursing staff, on the other hand, described significant improvements in safety, overall facility design, and development. Staff noted that the PR format initially disrupted communication and their sense of teamwork with other staff; however, these ratings decreased





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significantly by the third round of surveys. The results suggest that while PR rooms might help accommodate parents in NICUs, staff may face an adjustment period.

#### Limitations

This study took place in a single NICU and gathered data from a set group of participants over a relatively long period of time. Parents and staff were issued the same surveys; some survey items may have been more applicable to nursing staff rather than parents, and vice versa.

### **Design Implications**

Before implementing a widespread private-room format for NICU units, designers might consider nursing staff perspectives on how the structural shift might alter workflows and general communications. Should an NICU be renovated to accommodate more private rooms, designers might consider supplementing these spaces with more comfortable furniture and interior design accommodations for parents.

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