



KEY POINT SUMMARY

OBJECTIVES

This article presents the experience of one unit in the design and transition from a traditional setting to the private room model.

Challenges in Design and Transition to a Private Room Model in the Neonatal Intensive Care Unit

Carlson, B., Walsh, S., Wergin, T., Schwarzkopf, K., Ecklund, S.
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Key Concepts/Context

The need for neonatal intensive care units (NICU) is increasing at a time when research suggests their designs need to change to provide a developmentally appropriate healing environment. One approach is a private room NICU model versus a large multibed ward. However, such a radical design change could be challenging to implement.

Methods

This study evaluated the experiences of neonatal nurses and families in one unit of a Level III regional 261-bed private hospital in the Midwest that moved from a traditional multibed ward setting to a new 27-bed private-room NICU. To guide the process, the facility used Reddin's theory of planned change: (1) diagnosis, (2) mutual setting of objectives, (3) group emphasis, (4) maximizing information, (5) discussion of implementation, (6) use of ceremony and ritual, and (7) resistance interpretation.

Findings

Based on the staff pre/post transition survey, the researchers found improvement in job satisfaction, change, team support, and input. In addition, the survey found that the nurses' concerns about patient assignments, proximity to patients, and patient ratios were less troublesome than anticipated. The authors also note that while staff maintained 100% productivity, nurses had to cope with a considerable volume of new information, coupled with new ways to practice, and continued information reinforcement was needed. On the parent side, the researchers noted that the pre/post transition survey showed a dramatic improvement in privacy,



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noise, light, and confidentiality. According to preliminary financial reports, the average length of stay decreased modestly from 10.9 to 10.3 days. Multidirectional communication that included hospital administration, architects, vendors and suppliers, ancillary units, and the families of NICU patients was cited as the key to transitioning to the private room model. The research also revealed that the importance of close proximity and cross collaboration of novice and expert nurses was underestimated. Thus, safety issues may outweigh the benefits of a private room NICU in some facilities, especially those with chronic staffing problems.

Limitations

Case study outcomes inherently limit generalizability. Another limitation of this study was that it failed to carefully define design variables, metrics, measurement methods, and outcomes.

Design Implications

The Reddin's theory of planned change is a promising process for designers to engage in, as well as form relationships between organizational leadership, direct-care staff, and ancillary services in the design process. This article suggests that engaging staff in gathering information (i.e., conferences, tours, mockups) and reviewing the developmental care literature is helpful when designing NICU environments. It also suggests that using homelike elements can improve comfort, privacy, and quiet surroundings. Finally, the article suggests that it might be helpful to communicate with staff via graffiti boards, where suggestions and information related to design and construction are posted.