

## Documenting the NICU design dilemma: comparative patient progress in open-ward and single family room units.

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### **Abstract**

**Objective:**To test the efficacy of single family room (SFR) neonatal intensive care unit (NICU) designs, questions regarding patient medical progress and relative patient safety were explored. Addressing these questions would be of value to hospital staff, administrators and designers alike.**Study Design:**This prospective study documented, by means of Institution Review Board-approved protocols, the progress of patients in two contrasting NICU designs. Noise levels, illumination and air quality measurements were included to define the two NICU physical environments.**Result:**Infants in the SFR unit had fewer apneic events, reduced nosocomial sepsis and mortality, as well as earlier transitions to enteral nutrition. More mothers sustained stage III lactation, and more infants were discharged breastfeeding in the SFR.**Conclusion:**This study showed the SFR to be more conducive to family-centered care, and to enhance infant medical progress and breastfeeding success over that of an open ward.**Journal of Perinatology** advance online publication, 11 November 2010; doi:10.1038/jp.2010.120.

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