



We sought to determine whether private rooms were associated with a lower risk of central-line infections” O’Neill et al (2018).

Abstract:

Private hospital rooms are believed to offer some protective effect against hospital-acquired infections, including central line-associated bloodstream infections. Yet a recent meta-analysis found the evidence-base to be lacking from a policy perspective. We sought to determine whether private rooms were associated with a lower risk of central-line infections. We examined the discharge records of more than one million inpatients from 335 Texas hospitals to determine patients that stayed in private rooms. Patients who stayed in bay rooms had 64 percent more central line infections than patients who stayed in private rooms. Even after adjusting for relevant covariates, patients assigned to bay rooms had a 21 percent greater relative risk of a central line infection ($p = 0.005$), compared with patients assigned to private rooms. At the hospital level, a 10% increase in private rooms was associated with an 8.6% decrease in central line infections ($p < 0.001$), regardless of individual patients’ room assignment. This study demonstrates and validates the use of private rooms as a structural measure and independent predictor of hospital quality.

Reference:

O'Neill, L., Park, S.H. and Rosinia, F. (2018) The role of the built environment and private rooms for reducing central line-associated bloodstream infections. PLoS One. 13(7), p.e0201002.

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