

10 Title	Nurse Working Conditions and Patient Safety Outcomes
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Abstract	<p>Background: System approaches, such as improving working conditions, have been advocated to improve patient safety. However, the independent effect of many working condition variables on patient outcomes is unknown.</p> <p>Objective: To examine effects of a comprehensive set of working conditions on elderly patient safety outcomes in intensive care units.</p> <p>Design: Observational study, with patient outcome data collected using the National Nosocomial Infection Surveillance system protocols and Medicare files. Several measures of health status and fixed setting characteristics were used to capture distinct dimensions of patient severity of illness and risk for disease. Working condition variables included organizational climate measured by nurse survey; objective measures of staffing, overtime, and wages (derived from payroll data); and hospital profitability and magnet accreditation.</p> <p>Setting and Patients: The sample comprised 15,846 patients in 51 adult intensive care units in 31 hospitals depending on the outcome analyzed; 1095 nurses were surveyed.</p> <p>Main Outcome Measures: Central line associated bloodstream infections (CLBSI), ventilator-associated pneumonia, catheter-associated urinary tract infections, 30-day mortality, and decubiti.</p> <p>Results: Units with higher staffing had lower incidence of CLBSI, ventilator-associated pneumonia, 30-day mortality, and decubiti ($P \leq 0.05$). Increased overtime was associated with higher rates of catheter-associated urinary tract infections and decubiti, but slightly lower rates of CLBSI ($P \leq 0.05$). The effects of organizational climate and profitability were not consistent.</p> <p>Conclusions: Nurse working conditions were associated with all outcomes measured. Improving working conditions will most likely promote patient safety. Future researchers and policymakers should consider a broad set of working condition variables.</p>