

- Title:** Examining the Impact and Value of Nursing Practices to Reduce Re-Hospitalizations
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- Purpose:** To determine the relationships between unit-level nurse staffing, quality of discharge teaching, readiness for hospital discharge, and rates of emergency department (ED) visits and re-hospitalizations in the first 30 days after hospital discharge; and to estimate the cost-benefit of investing in nurse staffing to improve patient outcomes.
- Background:**
- Higher nurse staffing levels measured at the organizational level have been associated with better inpatient outcomes and lower 30-day mortality rates.
 - Poor discharge preparation has been associated with difficulty coping at home after discharge, and with re-hospitalizations.
- Methods:**
- The study was conducted on 16 medical surgical units at four hospitals in a single Midwestern health care system.
 - The researchers used a prospective, longitudinal, observational multi-level study design with a panel of patient-level data and unit-level monthly nurse staffing data.
- Measures:**
- Nurses on the patient care unit are responsible for discharge preparation, which is a core nursing process that occurs over the course of hospitalization.
 - Discharge readiness is a nurse sensitive outcome of discharge preparation.
- Key Findings:**
- Higher non-overtime RN hours per patient day [RNHPPD] were associated with decreased likelihood of re-hospitalization within 30 days post-discharge.
 - Higher overtime RNHPPD were associated with increased likelihood of an ED visit.
 - Higher non-overtime RN staffing was indirectly associated reduced ED visits, via a sequential path through quality of discharge teaching and discharge readiness.
 - Investments in increased RNHPPD could produce substantial potential savings from reduced post-discharge utilization costs.
 - Savings would be retained by the payers, which reduces the internal financial return to the organization from investment in nurse staffing.
 - The study findings support these recommendations: monitor and manage unit-level nurse staffing to minimize re-hospitalizations and ED use after hospital discharge; assess quality of discharge teaching and readiness standard practices within hospital discharge preparation processes; and realign payment incentives to offset the costs of increasing nurse staffing, avoiding costs through improved post-discharge utilization.
- References:**
- Weiss, M., Yakusheva, O., & Bobay, K. (2010). "Nurse and patient perceptions of discharge readiness in relation to post-discharge utilization." *Medical Care* 48(5), 482-486.
- Bobay, K., Yakusheva, O., & Weiss, M. (2011). "Outcomes and cost analysis of the impact of unit-level nurse staffing on post-discharge utilization." *Nursing Economics* 29(2), 69-78, 87.
- Weiss, M., Yakusheva, O., & Bobay, K. (2011). "Nursing staffing, readiness for hospital discharge, and post-discharge utilization." *Health Services Research* 46(5), 1473-1494.