

Title:

Does Independent Advanced Practice Nursing Scope Influence Excess Pneumonia Readmissions

Laura Ellen Prado, MSN

Erin Biscone, MSN, BSN

Phyllis Wright, PhD, MSN

John Cranmer, DNP, MSN, BSN

Nell Hodgson Woodruff School of Nursing, Emory University, Atlanta, GA, USA

Session Title:

Rising Stars of Research and Scholarship Invited Student Poster Session 1

Keywords:

Advanced Practice Nursing, Medicare 30-day re-admissions and Scope of practice

References:

DeAlba, I., & Amin, A. (2014). Pneumonia Readmissions: Risk Factors and Implications. *The Oschner Journal* 14(4), 649-654. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4295742/> Centers for Medicare and Medicaid (2015) Hospital compare data sets. Retrieved from <https://data.medicare.gov/data/hospital-compare>

Abstract Summary:

Hospitals located in states where APRNs practice independently had 3.7% lower 30-day Medicare re-admissions for pneumonia compared with hospitals located in states where APRNs have legally-imposed restrictions on their scope of practice. Discharge teaching, care plan transmission, influenza vaccination and tobacco use did not lower pneumonia excess 30-day re-admissions.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to differentiate between states with full practice authority vs limited practice authority for APRN's	This will be accomplished through presentation of graph of the US with legend of state's scope of practice.
The learner will be able to discuss that states with full practice APRN authority have a statistically lower 30- day readmission rate for pneumonia.	This will be accomplished through demonstration of statistical evidence that states with full practice authority have 30 day fewer readmissions.

Abstract Text:

Background: The Patient Protection and Affordable Care Act (PPACA) became law in 2010. Two major goals of the legislation were to reduce health care costs and improve quality of care. Hospital readmissions within 30 days of discharge were identified as a significant expense to the federal government that might be reduced by improving quality of care.

Purpose: To determine if clinical processes, prevention measures, or advanced practice registered nurse (APRN) practice environment influence excess 30-day excess readmission ratios for community-acquired pneumonia (PN) among patients insured by Medicare.

Methods: The relationship between the variables was analyzed by a multiple linear regression. Data included only those 65 and older enrolled in Medicare. The outcome variable was excess PN 30-day

readmissions as reported by Center for Medicare and Medicaid (CMS). The predictor variables were analyzed in three clusters—clinical processes, pneumonia primary prevention strategies and APRN practice environment. The clinical processes the Medicare dataset included the proportion of care plans transmitted and proportion of discharge instructions given. Primary prevention variables based on CDC data included the proportion of flu vaccinations and proportion of tobacco use. The APRN practice environment variable from Kaiser Family Foundation data categorized states as having full or restricted practice.

Results: Across the United States, independent APRN scope of practice was associated with a 3.7% reduction in the excess 30-day readmission ratio compared to states with restricted practice ($p = .000$). In contrast, clinical processes and primary prevention strategies were not associated with decreases in the excess readmission ration (care plan $B=0.000$, $p=0.469$; discharge $B=0.000$, $p=0.041$; tobacco $B=0.000$, $p=0.885$ and flu vaccine $B=0.001$, $p=0.018$)

Conclusions: Hospitals located in states where APRNs practice independently had a 3.7% lower 30-day readmission ratio for PN compared with hospitals located in states where APRNs have legally-imposed restrictions on their scope of practice. Higher proportions of discharge teaching, care plan transmission, influenza vaccination and lower proportions of tobacco use did not lower the national PN excess 30-day readmission ratio.

Implications for nursing education, practice and/or research: In clinical trials, APRN have demonstrated high quality health care. In these national data, independent APRN scope of practice was associated with a statistically significantly lower excess readmission ratio for pneumonia. Consequently, among multiple strategies for reducing 30-day readmissions, we recommend APRNs, consumers, and policy makers work to remove legal barriers to independent APRN practice. This approach is supported by the IOM's recommendation that nurses practice at the highest level of their education. Future research should be done to identify how scope of practice differences contributes to reductions in 30-day readmissions.