Exploring Hospital Nursing Resources to Address Racial Disparities in Outcomes Among Older Adults Living with Multiple Chronic Conditions (MCCs)

Colleen A. Pogue, PhD, RN

Purpose/Aim: This study sought to (1) determine whether nursing resources are associated with disparities in outcomes (length of stay and readmissions) between black, Hispanic, and white older adults with multiple chronic conditions (MCCs), and (2) determine whether there is an association between discharge readiness and disparities in outcomes, and whether and to what extent differences in discharge readiness explain any observed relationship between nursing resources and outcome disparities.

The aims of the study were not fully met because before focusing on disparities, I realized I needed to first conduct preliminary analysis to examine the effect of nurse assessments of discharge readiness on 30-day readmissions across older adults living with MCCs.

Sample: The total patient sample included 188,806 Medicare fee-for-service beneficiaries ages 65+ who were discharged home/to self-care following hospitalization for a general, orthopedic, or vascular surgical procedure as identified by Medicare Severity Diagnosis Related Groups.

Setting: The analytic sample included, on average, 26 nurses from each of the 424 non-federal, acute care hospitals located in California, Florida, New Jersey, and Pennsylvania.

Methodology: Cross-sectional study linking 3 secondary data sources (i.e., nurse survey, hospital survey, and Medicare claims data) representing 424 hospitals. Discharge readiness was derived from the 2016 RN4CAST-US survey. Medicare claims data was used to determine MCC count. The outcome was 30-day readmissions across MCC count.

Results: The average discharge readiness score was 0.45 (range = 0-0.86). For each 10% increase in the proportion of nurses in a hospital who were confident in their patients' discharge readiness, the odds of 30-day readmission decreased by 2% (95% CI [0.96, 1.00]; $p = 0.028$) for patients with 2-4 MCCs and 3% (95% CI [0.94, .99]; $p = 0.015$) for patients with ≥5 MCCs, relative to patients with 0-1 MCCs.

Conclusion: Our findings suggest that nurses are valuable informants of discharge readiness among older adults living with MCCs — a growing population that is increasingly complex. Nurse assessments of discharge readiness may be a useful signal for hospitals to reduce readmissions and examine factors interfering with discharge processes.

Implications: Considering the constant pursuit to decrease readmissions, hospitals would be remiss to not leverage the informed assessments of nurses to identify older, multimorbid adults that are at high risk for readmission.