Implementing an enhanced discharge teaching protocol
to reduce 30-day readmission rates in
adults diagnosed with sickle cell disease

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"On my honor, I pledge that I have neither given nor received any unauthorized assistance on this paper" - JTW 05/05/2020.

Abstract

Background: Sickle Cell Disease (SCD) is a painful genetic disorder characterized by abnormal hemoglobin that affects 1-in-365 African American births. SCD requires frequent hospitalizations, resulting in 30-day readmission rates 2.5 times higher than non-SCD rates. One strategy to reduce readmission rates is to improve the discharge process.

Objectives: This quality improvement project sought to determine the impact of implementing the Project RED (Re-engineered Discharge) protocol on 30-day readmissions for SCD patients and evaluate nurses' adherence to the protocol.

Methods: This project utilized a pre/post test design to measure nurses' adherence and 30-day readmission rates compared to 2017 rates. This was a nurse-led initiative which incorporated components of the Project RED protocol and consisted of the following: patient and medication education, SCD specific discharge teaching handouts, and post-discharge follow-up phone calls to reinforce teaching. Analyses included descriptive statistics and Fisher's exact test.

Results: Ten of the 14 nurses trained provided discharge teaching to 10 patients (including two who were readmitted) over the 12-week period. It is not known how many other patients with SCD were eligible and did not receive the intervention. Therefore, nurse adherence to the protocol cannot be determined. Results showed the study's 30-day readmission rates were 20% (2 of 10 patients) compared to 38.24% (65 of 170 patients) readmission rates in 2017. Although the results were not statistically significant, the study achieved an 48 % reduction in readmissions rates pre/post intervention.

Conclusions: The utilization of an enhanced discharge teaching protocol is a practical solution to increase patients' readiness for discharge and to reduce 30-day readmission rates. Project RED discharge teaching protocol is an effective strategy for nurses to employ to improve patient outcomes and quality of care for persons with SCD.