IMPLEMENTING AN ENHANCED DISCHARGE TEACHING PROTOCOL TO REDUCE 30-DAY READMISSION RATES IN ADULTS DIAGNOSED WITH SICKLE CELL DISEASE

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BACKGROUND AND SIGNIFICANCE

Sickle Cell Disease (SCD) is a genetic disorder affecting 1-in-365 African-American births. It is characterized by abnormal hemoglobin that causes painful vaso-occlusive crises (VOC). VOC requires frequent hospitalizations. SCD-related 30-day readmission rates were 38.24% at our institution compared to 12.5% for non-SCD readmissions nationwide.

Improving the discharge process may reduce readmission rates. The Re-engineered Discharge (Project RED) protocol is an evidenced-based intervention that can improve the discharge process and further reduce readmission rates.

PURPOSE AND AIMs

To examine the effectiveness of a nurse-led evidence-based discharge teaching intervention on nurses’ adherence to the intervention and 30-day readmissions for persons with SCD. The aims of this quality improvement project are:

1. To achieve at least 80% in nurses’ adherence to the enhanced discharge teaching protocol
2. Reduce 30-day readmission rates by 25% in persons admitted with VOC over 12 weeks post-implementation

METHODS

- **Design:** Pre/Post intervention conducted on a hematology/oncology unit in a Mid-Atlantic hospital
- **Participants:**
  1. **RN:** all nurses providing bedside care
  2. **Patients:** ages 18+ admitted with SCD, ready for discharge over the 12-week time-frame (10/2019 - 12/2019)
- **Measures:**
  1. Checklist indicating nurses’ adherence rate to protocol
  2. 30-day readmission rates for 12-week period compared to discharge teaching with a prevalence of 20% (2/10), compared to 38.24% (65/170) readmission rate for 2017

- **Analyses:**
  - Descriptive statistics; Frequency counts of discharges and adherence to the discharge teaching protocol; Fisher’s exact test for readmission rates

INTERVENTION: PROJECT RED TEACHING PROTOCOL

11 Components of Project RED

- Patient education
- Medication reconciliation
- Follow-up appointments
- Follow-up of pending tests or labs
- Post discharge services and medical equipment
- Reconcile the discharge plan with national guidelines
- Written discharge plan the patient understand.
- What to do if a problem arises.
- Assess patient understanding
- Discharge summary to primary care provider.
- Telephone reinforcement of the discharge plan.

RESULTS

Aim 1: 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.

Aim 2: Primary outcome results indicated no statistical association between readmission rates and discharge teaching with a prevalence of 20% (2/10), compared to 38.24% (65/170) readmission rate for 2017.

DISCUSSION

Results showed 48% reduction in 30-day readmission rates pre/post intervention. Positive impact on improving the discharge process and patient compliance with early follow-up.

LIMITATIONS:

- Small sample
- Disrupted workflow; nurses had to complete discharge in EMR and on paper
- Competing priorities for nurses who also care for oncology patients

STRENGTHS:

- Focused on the pressing and unmet needs of SCD patients
- Continued support and resource of advanced practice nurse
- Nurse champions to aid in sustainability of the project

CONCLUSION

Enhanced Discharge intervention can:

- Be a practical solution in lowering 30-day readmission rates
- Increase patient readiness for discharge

Project RED discharge teaching is an effective strategy for nurses to incorporate to improve quality of care for persons with SCD.

REFERENCES