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Areas for Quality Improvement in Pediatric Sickle Cell Management



Introduction: Acute Chest Syndrome (ACS) and Vaso-occlusive Pain (VOP) are known serious events that occur in patients with Sickle Cell Disease (SCD) and can result in high morbidity and mortality in this patient population. Adequately treating patients with SCD involves early and effective treatment of pain and early identification and intervention for ACS or stroke. The use of Incentive Spirometry (IS) and adequate pain management in hospitalized patients with SCD leads to decreased incidence of ACS and decreased length of hospital stay.

Methods: Initial baseline documentation for IS was reviewed with 0% active use in nursing flowsheets. Initiatives to encourage nursing documentation, provider review, and survey use have been encouraged. Survey results will be compared with patient admission data. In addition, a pain-management case is being reviewed and presented in the setting of transition from the PED to PHO floor. Multidisciplinary discussion will occur in three phases, the PED nursing team, PHO floor department, and PED department.

Results: Given the baseline for the documented IS was previously noted to be 0%, a minimum improvement of 25% IS use in SCD patients is anticipated. In addition, patients with pain admitted from PED will have pain scores of 7/10 or lower on admission to PHO Floor with initiation of interventions based on multidisciplinary discussions with the PED and PHO departments.

Conclusions: The improvement in delivery of care to pediatric SCD is of great importance with multiple areas identified for growth. These interventions taking effect would aim to decrease escalation to ACS and improve hospital duration for patients when they have early use of IS and optimal pain management.