Emergency Department Guideline
Sickle Cell Disease

Objective: To rapidly evaluate and begin treatment for the child presenting to the ED with Sickle Cell Disease (SCD) complications. Goal: Clinical and laboratory evaluation completed, IV antibiotics given within 60 minutes of presentation for the child with SCD and fever.

Indication:
1. The child with SCD and fever.
2. The child with SCD and a painful crisis.
3. The child with SCD and respiratory distress, pallor, splenomegaly, neurologic symptoms, or evidence of clinical instability.

Evaluation/Intervention:
1. Check vital signs, weight in kg, rectal temperature (or tympanic if >6 months of age) and pulse oximetry.
2. Place children with an oxygen saturation <92%, or clinical evidence of respiratory distress, on supplemental oxygen.
3. For temperature >38.0 give acetaminophen 15mg/kg PO/PR, if none previously given, or if >4 hours since last dose. Consider ibuprofen 10 mg/kg PO for children >6 months of age.
5. Obtain IV access, draw CBC, reticulocyte count.
   a. For fever, add blood culture. Consider chest x-ray for possible Acute Chest Syndrome (ACS). Consider UA/UC for pre-school age girls or all infants <6 months of age.
   b. For pain, give pain medications per ED attending physician.
   c. For respiratory distress, pallor, splenomegaly, neurologic symptoms, or other evidence of clinical instability, draw Type and Crossmatch.
6. Fever or Acute Chest syndrome (ACS)
   a. Ceftriaxone 75mg/kg IV, to maximum dose of 2gms.
   b. Consider Vancomycin 15mg/kg IV, to maximum dose of 1gm, for possible penicillin-resistant Streptococcus pneumoniae.
   c. Consider albuterol nebs, azithromycin or erythromycin, PRBC transfusion for ACS.
Documentation:
1. Triage vital signs, weight, pulse oximetry.
2. Vital signs after each intervention, including oximetry.
3. Time of each intervention