Co-managing Hydroxyurea* monitoring for Pediatric Patients with Sickle Cell Anemia

Child ≥ 9 months with Sickle Cell Anemia (HbSS, HbSb0thal)

On hydroxyurea?

Yes

Consistently taking doses? (missing no more than 1 dose per week?)

Yes

On stable dose for at least 2 months?

Yes

Dose is within range of 20-30mg/kg

Yes

Monitor CBC, reticulocyte count at least every 3 months while on stable dose

Absolute Neutrophil Count (ANC) ≥2,000/μL
Platelets ≥80,000
Absolute Reticulocyte Count (ARC) ≥80,000

Yes

Continue on current dose*

No

Hold dose and consult with Sickle Cell Specialist about needed dose change

No

Consult with Sickle Cell Specialist about dose and monitoring until stable dose. Monitoring typically every month until stable.

No

Emphasize importance of taking as directed and benefits

Consult with Sickle Cell Specialist about need to initiate.

*Hydroxyurea is a teratogen. Reproductive Planning is very important. Discuss recommendation for Long Acting Reversible Contraceptive (LARC) for adolescent females if on Hydroxyurea. Progesterone-only contraception may be preferable. Current recommendation is to discontinue Hydroxyurea for men and women before a planned pregnancy and for women while breastfeeding.

Developed by Community Care of North Carolina, the NC Division of Public Health; the comprehensive sickle cell centers at Carolinas Health Care, Duke University, East Carolina University, University of North Carolina at Chapel Hill, Mission, and Wake Forest University; Endorsed by (SC)². Adapted from the 2014 NIHHLBI guidelines for Evidence-Based Management of Sickle Cell Disease.