Sickle cell disease (SCD) is an inherited blood disorder that affects the red blood cells and occurs when a person has inherited a sickle cell gene from each parent. The sickle-shaped red blood cells break apart easily, clump together, and stick to the walls of blood vessels, blocking the flow of blood and causing a range of complications, including severe pain, acute chest syndrome (a condition that affects the lungs), stroke, organ damage, and even premature death.

The American Society of Hematology (ASH) believes it is essential to provide updated treatment guidelines that reflect the newest evidence about the disease, ensuring the medical community can better treat SCD and people with SCD can make the best decisions for their care.

In partnership with the Evidence-Based Practice Research Program at Mayo Clinic, the 2019-2020 ASH Clinical Practice Guidelines on SCD were developed using the GRADE methodology to ensure the highest standards for trustworthiness. ASH brought together more than 70 experts, including hematologists, clinicians from other specialties, and patient and caregiver representatives to identify best practices for the management of acute and chronic complications of SCD and ways to improve the quality of care for patients.

**GOAL**

Produce and maintain evidence-based guidelines that will support health care providers, patients, and caregivers in making the best care decisions.

**RATIONALE**

Care of patients with SCD is often the responsibility of primary care, family, and emergency medicine physicians.

- 80% of family physicians report feeling uncomfortable treating people with SCD.
- 73% of family physicians believe that more education and support tools would help avoid complications in managing SCD.
- 69% of family physicians report that clinical decision support tools would be useful for treating SCD.

These guidelines will provide evidence-based recommendations for emergency medicine physicians, primary care and family physicians, hematologists, and patients about how to manage SCD, including how to individualize care in accordance with patient preference and values. And, where evidence is not strong enough, these guidelines will recommend that more clinical research is needed.

**CONDITIONS/TOPICS ADDRESSED**

- SCD Pain Management
- SCD Related Cardiopulmonary and Kidney Disease
- SCD Related Cerebrovascular Disease
- SCD stem cell transplantation
- SCD Transfusion Support
The American Society of Hematology (ASH) (www.hematology.org) is the world’s largest professional society of hematologists dedicated to furthering the understanding, diagnosis, treatment, and prevention of disorders affecting the blood. For more than 60 years, the Society has led the development of hematology as a discipline by promoting research, patient care, education, training, and advocacy in hematology.

MULTI-YEAR, STATE-OF-THE-ART, TRANSPARENT, AND SCIENTIFIC PROCESS

Establish

2016

Appoint

panel members from a diverse range of medical specialties: Every panel included U.S. and international experts from multiple disciplines, such as hematology and neurology as well as experts in evidence synthesis and guideline development.

Recruit

patient representatives for panels: Each panel had at least one patient representative who participated equally with the medical experts throughout the entire development process.

Systematically Review

all available evidence.

Prioritize

guideline questions.

Obtain

stakeholders and public input on draft recommendations.

Develop

recommendations.

Submit

final guidelines for publication in peer-reviewed journal, Blood Advances.

2019–2020

For more information on these new guidelines, visit: www.hematology.org/SCDguidelines