Steps to Improve Transfusion Practices for Patients with Sickle Cell Disease and Thalassemia

Follow this and additional works at: https://scholarworks.gsu.edu/ghpc_briefs

Recommended Citation
Georgia Health Policy Center, "Steps to Improve Transfusion Practices for Patients with Sickle Cell Disease and Thalassemia" (2019). GHPC Briefs. 35.
https://scholarworks.gsu.edu/ghpc_briefs/35
Steps to Improve Transfusion Practices for Patients With Sickle Cell Disease and Thalassemia

BACKGROUND

Georgia has one of the nation’s largest populations of individuals with sickle cell disease (SCD) and thalassemia. For many of these individuals, blood transfusion may be needed on a regular, intermittent, or emergency basis. In order to avoid serious complications, like alloimmunization and iron overload, among patients who receive multiple transfusions in their lifetime, patients, physicians, and blood bank personnel need to know and follow specific, recommended practices.

The Centers for Disease Control and Prevention funds Georgia’s REdHHoTT project to reduce complications of therapeutic blood transfusion in SCD and thalassemia. As part of this work, the Georgia Health Policy Center surveyed Georgia hospital transfusion services (blood banks) to gauge adherence to currently recommended practices and to inform improvement strategies.

Hospital Blood Bank Survey Results

Thirty-five institutions responded (71%), of which 32 reported experience transfusing SCD patients and 11 reported experience transfusing thalassemia patients. Responding institutions that are classified as comprehensive sickle cell treatment centers (n = 3) or thalassemia treatment centers (n = 1) follow applicable practice recommendations. Results varied among the remaining hospitals, as illustrated below.

* Full results were published in Fasano, R. M., Branscomb, J., Lane, P., Josephson, C., Snyder, A., & Eckman, J. (2019). Transfusion service knowledge and immunohaematological practices related to sickle cell disease and thalassemia. Transfusion Medicine Reviews, https://doi.org/10.1111/tme.12580

Contact the Georgia Health Policy Center to request grand rounds or consultation with specialists in thalassemia and SCD management, transfusion medicine, and blood bank practices.
Email: BloodDisorders@gsu.edu

Watch a continuing education course, Reducing Complications of Therapeutic Blood Transfusion in Sickle Cell Disease at ghpc.gsu.edu/cme

Learn more about REdHHoTT visit bit.ly/GHPC_SCDC
**Commonly Cited Challenges**

Respondents were given an open-ended question to describe challenges they face regarding transfusing patients with hemoglobin disorders. The following challenges were cited multiple times:

- Lack of standard policies/procedures (within a health system or across hospitals) for red blood cell phenotyping and blood product matching
- Securing appropriately matched red blood cell units for alloimmunized patients
- Lack of standardized procedures for notifying transfusion services that a patient has either SCD or thalassemia
- Obtaining a reliable and complete transfusion and antibody history across multiple hospital systems

**What Providers Can Do**

- Review the full report on this study and the practice recommendations
- View a web-based video series for clinicians on transfusion recommendations for SCD, with free continuing medical education and continuing nursing education credits provided through CDC: ghpc.gsu.edu/cme
- View a recorded webinar series for sickle cell patients and caregivers on avoiding transfusion complications, as part of the Sickle Cell Community Consortium’s Warrior University: sicklecellconsortium.org/warrior-u-transfusions
- Contact the Georgia Health Policy Center to request grand rounds or consultation with specialists in thalassemia and SCD management, transfusion medicine, and blood bank practices as part of the REdHHoTT project. Email BloodDisorders@gsu.edu

---

1. **SCD recommendations:**

2. **Thalassemia guidelines:**

---

This publication is supported by Cooperative Agreement DD14-1406, funded by the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the CDC or the U.S. Department of Health and Human Services.