



Dissemination of Research

Publications

2018

Baumann AA, Belle SH, James A, King AA; Sickle Cell Disease Implementation Consortium. Specifying sickle cell disease interventions: a study protocol of the Sickle Cell Disease Implementation Consortium (SCDIC). *BMC Health Serv Res*. 2018 Jun 27;18(1):500. doi: 10.1186/s12913-018-3297-1. PMID: 29945631; PMCID: PMC6020469.

DiMartino LD, Baumann AA, Hsu LL, Kanter J, Gordeuk VR, Glassberg J, Treadwell MJ, Melvin CL, Telfair J, Klesges LM, King A, Wun T, Shah N, Gibson RW, Hankins JS; Sickle Cell Disease Implementation Consortium. The sickle cell disease implementation consortium: Translating evidence-based guidelines into practice for sickle cell disease. *Am J Hematol*. 2018 Dec;93(12):E391-E395. doi: 10.1002/ajh.25282. Epub 2018 Oct 17. PMID: 30203558; PMCID: PMC6503654.

2019

Mase RV, Bulgin D, Douglas C, Shah N, Tanabe P. Barriers and facilitators to care for individuals with sickle cell disease in central North Carolina: The emergency department providers' perspective. *PLoS One*. 2019 May 7;14(5):e0216414. doi: 10.1371/journal.pone.0216414. PMID: 31063506; PMCID: PMC6504169.

2020

Alberts NM, Badawy SM, Hodges J, Estep JH, Nwosu C, Khan H, Smeltzer MP, Homayouni R, Norell S, Klesges L, Porter JS, Hankins JS. Development of the InCharge health mobile app to improve adherence to hydroxyurea in patients with sickle cell disease: User-centered design approach. *JMIR Mhealth Uhealth*. 2020 May 8;8(5):e14884. doi: 10.2196/14884. PMID: 32383683; PMCID: PMC7245000.

Glassberg JA, Linton EA, Burson K, Hendershot T, Telfair J, Kanter J, Gordeuk VR, King AA, Melvin CL, Shah N, Hankins JS, Epié AY, Richardson LD; Sickle Cell Disease Implementation Consortium. Publication of data collection forms from NHLBI funded sickle cell disease implementation consortium (SCDIC) registry. *Orphanet J Rare Dis*. 2020 Jul 7;15(1):178. doi: 10.1186/s13023-020-01457-x. PMID: 32635939; PMCID: PMC7341606.

Hankins JS, Shah N, DiMartino L, Brambilla D, Fernandez ME, Gibson RW, Gordeuk VR, Lottenberg R, Kutlar A, Melvin C, Simon J, Wun T, Treadwell M, Calhoun C, Baumann A, Potter MB, Klesges L,

Bosworth H; Sickle Cell Disease Implementation Consortium. Integration of mobile health into sickle cell disease care to increase hydroxyurea utilization: Protocol for an efficacy and implementation study. *JMIR Res Protoc*. 2020 Jul 14;9(7):e16319. doi: 10.2196/16319. PMID: 32442144; PMCID: PMC7388044.

Hodges JR, Phillips SM, Norell S, Nwosu C, Khan H, Luo L, Badawy SM, King A, Tanabe P, Treadwell M, Rojas Smith L, Calhoun C, Hankins JS, Porter J. Intentional and unintentional nonadherence to hydroxyurea among people with sickle cell disease: a qualitative study. *Blood Adv*. 2020 Sep 22;4(18):4463-4473. doi: 10.1182/bloodadvances.2020001701. Erratum in: *Blood Adv*. 2020 Oct 13;4(19):4822. PMID: 32941646; PMCID: PMC7509876.

Kanter J, Gibson R, Lawrence RH, Smeltzer MP, Pugh NL, Glassberg J, Masese RV, King AA, Calhoun C, Hankins JS, Treadwell M. Perceptions of US adolescents and adults with sickle cell disease on their quality of care. *JAMA Netw Open*. 2020 May 1;3(5):e206016. doi: 10.1001/jamanetworkopen.2020.6016. PMID: 32469413; PMCID: PMC7260622.

Knisely MR, Pugh N, Kroner B, Masese R, Gordeuk V, King AA, Smith SM, Gurney JG, Adams R, Wun T, Snyder A, Glassberg J, Shah N, Treadwell M; Sickle Cell Disease Implementation Consortium. Patient-reported outcomes in sickle cell disease and association with clinical and psychosocial factors: Report from the sickle cell disease implementation consortium. *Am J Hematol*. 2020 Sep;95(9):1066-1074. doi: 10.1002/ajh.25880. Epub 2020 Jun 29. PMID: 32449965; PMCID: PMC8141351.

Linton EA, Goodin DA, Hankins JS, Kanter J, Preiss L, Simon J, Souffront K, Tanabe P, Gibson R, Hsu LL, King A, Richardson LD, Glassberg JA; Sickle Cell Disease Implementation Consortium. A survey-based needs assessment of barriers to optimal sickle cell disease care in the emergency department. *Ann Emerg Med*. 2020 Sep;76(3S):S64-S72. doi: 10.1016/j.annemergmed.2020.08.013. PMID: 32928465; PMCID: PMC7511000.

Masese RV, DiMartino T, Bonnabeau E, Burns EN, Preiss L, Varughese T, Nocek JM, Lasley P, Chen Y, Davila C, Nwosu C, Scott S, Bowman L, Gordon L, Clesca C, Peters-Lawrence M, Melvin C, Shah N, Tanabe P; SCD Implementation Consortium. Effective recruitment strategies for a sickle cell patient registry across sites from the Sickle Cell Disease Implementation Consortium (SCDIC). *J Immigr Minor Health*. 2021 Aug;23(4):725-732. doi: 10.1007/s10903-020-01102-6. Epub 2020 Oct 9. PMID: 33034793; PMCID: PMC8032811.

Treadwell, M. J., Jacob, E., Hessler, D., Chen, A. F., Chen, Y., Mushiana, S., Potter, M.B. and Vichinsky, E. (2020). Health care disparities among adolescents and adults with sickle cell disease: A community-based needs assessment to inform intervention strategies. *JCOM*, 27(5).

2021

Crego N, Masese R, Bonnabeau E, Douglas C, Rains G, Shah N, Tanabe P. Patient perspectives of sickle cell management in the emergency department. *Crit Care Nurs Q*. 2021 Apr-Jun 01;44(2):160-174. doi: 10.1097/CNQ.0000000000000350. PMID: 33595963; PMCID: PMC8007091.

- Knisely MR, Tanabe PJ, Yang Q, Masese R, Jiang M, Shah NR. Severe pain profiles and associated sociodemographic and clinical characteristics in individuals with sickle cell disease. *Clin J Pain*. 2021 Sep 1;37(9):669-677. doi: 10.1097/AJP.0000000000000957. PMID: 34265788; PMCID: PMC8373671.
- Longoria JN, Pugh NL, Gordeuk V, Hsu LL, Treadwell M, King AA, Gibson R, Kayle M, Crego N, Glassberg J, Melvin CL, Hankins JS, Porter J. Patient-reported neurocognitive symptoms influence instrumental activities of daily living in sickle cell disease. *Am J Hematol*. 2021 Nov 1;96(11):1396-1406. doi: 10.1002/ajh.26315. Epub 2021 Aug 24. PMID: 34350622; PMCID: PMC8855994.
- Luo L, King AA, Carroll Y, Baumann AA, Brambilla D, Carpenter CR, Colla J, Gibson RW, Gollan S, Hall G, Klesges L, Kutlar A, Lyon M, Melvin CL, Norell S, Mueller M, Potter MB, Richesson R, Richardson LD, Ryan G, Siewny L, Treadwell M, Zun L, Armstrong-Brown J, Cox L, Tanabe P. Electronic health record-embedded individualized pain plans for emergency department treatment of vaso-occlusive episodes in adults with sickle cell disease: Protocol for a pre-implementation and postimplementation study. *JMIR Res Protoc*. 2021 Apr 16;10(4):e24818. doi: 10.2196/24818. PMID: 33861209; PMCID: PMC8087964.
- Masese RV, Bulgin D, Knisely MR, Preiss L, Stevenson E, Hankins JS, Treadwell MJ, King AA, Gordeuk VR, Kanter J, Gibson R, Glassberg JA, Tanabe P, Shah N; Sickle Cell Disease Implementation Consortium. Sex-based differences in the manifestations and complications of sickle cell disease: Report from the Sickle Cell Disease Implementation Consortium. *PLoS One*. 2021 Oct 29;16(10):e0258638. doi: 10.1371/journal.pone.0258638. PMID: 34714833; PMCID: PMC8555833.
- Masese RV, Crego N, Douglas C, Rains G, Bonnabeau E, DeMartino T, Shah N, Tanabe P. A needs assessment of persons with sickle cell disease in a major medical center in North Carolina. *N C Med J*. 2021 Sep-Oct;82(5):312-320. doi: 10.18043/ncm.82.5.312. PMID: 34544765.
- Smeltzer MP, Howell KE, Treadwell M, Preiss L, King AA, Glassberg JA, Tanabe P, Badawy SM, DiMartino L, Gibson R, Kanter J, Klesges LM, Hankins JS; Sickle Cell Disease Implementation Consortium. Identifying barriers to evidence-based care for sickle cell disease: Results from the Sickle Cell Disease Implementation Consortium cross-sectional survey of healthcare providers in the USA. *BMJ Open*. 2021 Nov 17;11(11):e050880. doi: 10.1136/bmjopen-2021-050880. PMID: 34789492; PMCID: PMC8601067.

2022

- Badawy SM, DiMartino L, Brambilla D, Klesges L, Baumann A, Burns E, DeMartino T, Jacobs S, Khan H, Nwosu C, Shah N, Hankins JS; Sickle Cell Disease Implementation Consortium. Impact of the COVID-19 pandemic on the implementation of mobile health to improve the uptake of hydroxyurea in patients with sickle cell disease: Mixed methods study. *JMIR Form Res*. 2022 Oct 14;6(10):e41415. doi: 10.2196/41415. PMID: 36240004; PMCID: PMC9578525.
- Knisely MR, Tanabe PJ, Walker JKL, Yang Q, Shah NR. Severe persistent pain and inflammatory biomarkers in sickle cell disease: An exploratory study. *Biol Res Nurs*. 2022 Jan;24(1):24-30. doi: 10.1177/10998004211027220. Epub 2021 Jun 30. PMID: 34189962; PMCID: PMC9248289.

Kroner BL, Hankins JS, Pugh N, Kutlar A, King AA, Shah NR, Kanter J, Glassberg J, Treadwell M, Gordeuk VR; Sickle Cell Disease Implementation Consortium. Pregnancy outcomes with hydroxyurea use in women with sickle cell disease. *Am J Hematol*. 2022 May;97(5):603-612. doi: 10.1002/ajh.26495. Epub 2022 Feb 17. PMID: 35142007; PMCID: PMC8986611.

Lamont AE, Hsu LL, Jacobs S, Gibson R, Treadwell M, Chen Y, Lottenberg R, Axelrod K, Varughese T, Melvin C, Smith S, Chukwudozie IB, Kanter J; Sickle Cell Disease Implementation Consortium. What does it mean to be affiliated with care?: Delphi consensus on the definition of "unaffiliation" and "specialist" in sickle cell disease. *PLoS One*. 2022 Nov 11;17(11):e0272204. doi: 10.1371/journal.pone.0272204. PMID: 36367870; PMCID: PMC9651581.

Phillips S, Chen Y, Masese R, Noisette L, Jordan K, Jacobs S, Hsu LL, Melvin CL, Treadwell M, Shah N, Tanabe P, Kanter J. Perspectives of individuals with sickle cell disease on barriers to care. *PLoS One*. 2022 Mar 23;17(3):e0265342. doi: 10.1371/journal.pone.0265342. PMID: 35320302; PMCID: PMC8942270.

Treadwell MJ, Mushiana S, Badawy SM, Preiss L, King AA, Kroner B, Chen Y, Glassberg J, Gordeuk V, Shah N, Snyder A, Wun T; Sickle Cell Disease Implementation Consortium (SCDIC). An evaluation of patient-reported outcomes in sickle cell disease within a conceptual model. *Qual Life Res*. 2022 Sep;31(9):2681-2694. doi: 10.1007/s11136-022-03132-z. Epub 2022 Apr 21. PMID: 35445915; PMCID: PMC9356962.

2023

Bhatt N, Calhoun C, Longoria J, Nwosu C, Howell KE, Varughese T, Kang G, Jacola LM, Hankins JS, King A. Health literacy correlates with abbreviated full-scale IQ in adolescent and young adults with sickle cell disease. *Pediatr Blood Cancer*. 2023 May;70(5):e30281. doi: 10.1002/pbc.30281. Epub 2023 Mar 2. PMID: 36861391.

Hankins JS, Brambilla D, Potter MB, Kutlar A, Gibson R, King AA, Baumann AA, Melvin C, Gordeuk VR, Hsu LL, Nwosu C, Porter JS, Alberts NM, Badawy SM, Simon J, Glassberg JA, Lottenberg R, DiMartino L, Jacobs S, Fernandez ME, Bosworth HB, Klesges LM, Shah N, the Sickle Cell Disease Implementation Consortium. A multi-level mHealth intervention boosts adherence to hydroxyurea in individuals with sickle cell disease. *Blood Advances*. 2023. doi: [10.1182/bloodadvances.2023010670](https://doi.org/10.1182/bloodadvances.2023010670). Epub 2023 Sep 22.

Hankins JS, Potter MB, Fernandez ME, Melvin C, DiMartino L, Jacobs SR, Bosworth HB, King AA, Simon J, Glassberg JA, Kutlar A, Gordeuk VR, Shah N, Baumann AA, Klesges LM; Sickle Cell Disease Implementation Consortium. Evaluating the implementation of a multi-level mHealth study to improve hydroxyurea utilization in sickle cell disease. *Front Health Serv*. 2023 Jan 20;2:1024541. doi: 10.3389/frhs.2022.1024541. PMID: 36925803; PMCID: PMC10012741.

Harris KM, Preiss L, Varughese T, Bauer A, Calhoun CL, Treadwell M, Masese R, Hankins JS, Hussain FA, Glassberg J, Melvin CL, Gibson R, King AA; Sickle Cell Disease Implementation Consortium. Examining Mental Health, Education, Employment, and Pain in Sickle Cell Disease. *JAMA Netw Open*. 2023 May 1;6(5):e2314070. doi: 10.1001/jamanetworkopen.2023.14070. PMID: 37200033; PMCID: PMC10196879.

Howell KE, Pugh N, Longoria J, Shah N, Kutlar A, Gordeuk VR, King AA, Glassberg J, Kayle M, Melvin C, Treadwell M, Hankins JS, Porter JS. Burden of Aging: Health Outcomes Among Adolescents and Young Adults With Sickle Cell Disease. *Hemasphere*. 2023 Jul 13;7(8):e930. doi: 10.1097/HS9.0000000000000930. PMID: 37456969; PMCID: PMC10348722.

Ibemere SO, Oyedeji CI, Preiss L, Van Althuis LE, Hankins JS, Azul M, Burns EN, Glassberg J, Hagar W, Hussain F, King A, Melvin C, Myers J, Snyder A, Shah N, Tanabe P, Sickle Cell Disease Implementation Consortium. Characterising the prevalence of overweight and obese status among adults with sickle cell disease. *Br J Haematol*. 2023 Mar;200(5):633-642. doi: 10.1111/bjh.18548. Epub 2022 Nov 16. PMID: 36382420; PMCID: PMC9957798.

Pizzo A, Porter JS, Carroll Y, Burcheri A, Smeltzer MP, Beestrum M, Nwosu C, Badawy S, Hankins JS, Klesges LM, Alberts NM. Provider prescription of hydroxyurea in youth and adults with sickle cell disease: A scoping review of prescription barriers and facilitators. *Br J Haematol*. 2023 (in press).

Stevenson E, Tanabe P, Knisely M, Masese R, Bulgin D, Preiss L, Hankins JS, King AA, Gordeuk V, Shah N. Infertility and treatment-seeking practices among females and males with sickle cell disease in the Sickle Cell Disease Implementation Consortium registry. *Pediatr Blood Cancer*. 2023 Jul;70(7):e30356. doi: 10.1002/pbc.30356. Epub 2023 Apr 14. PMID: 37057750.

Presentations

2017

Baumann A. Sickle Cell Disease Implementation Consortium (SCDIC): Findings from the First Year. Conference on the Science of Dissemination and Implementation in Health, December 4-6, 2017.

Treadwell M. ASCQ-Me and PROMIS in the Sickle Cell Disease Implementation Consortium Needs Assessment and Registry. HealthMeasures User Conference, November 17, 2017.

2018

Alberts N. User-Centered Design of a Mobile App for Increasing Adherence to Hydroxyurea in Sickle Cell Disease. International Society for Research on Internet Interventions (ISRII), 2019.

Calhoun C. Improving Transitions of Care for Young Adults with SCD: A Qualitative Needs Assessment for Intervention Design. NMHD Saunders Watkins Leadership Workshop, May 22-23, 2018.

Cole O. Characteristics of Affiliated vs. Non-affiliated Sickle Cell Patients at a Major Comprehensive Sickle Cell Center in Chicago. Foundation for Sickle Cell Disease Research, June 17, 2018.

DiMartino L. Implementation of Guideline-Based Care for Sickle Cell Disease: Findings from a Mixed Methods Needs Assessment. Conference on the Science of Dissemination and Implementation in Health, December 3-5, 2018.

Famutimi C. Motivations to Enroll or Not to Enroll in a Sickle Cell Disease Registry. Foundation for Sickle Cell Disease Research, June 17, 2018.

Hsu L, Gibson R, King A. Sickle Cell Disease Implementation Consortium (SCDIC). *Panel Session*, Foundation for Sickle Cell Disease Research, June 17, 2018.

Individual Presentations

Hsu L. Introducing the SCDIC.

Gibson R. SCDIC Needs Assessment and Registry.

King A. SCDIC Working Groups for Interventions.

Tanabe P, Treadwell M, Hankins J. Sickle Cell Disease Implementation Consortium (SCDIC). *Panel Session*, NHLBI Sickle Cell Disease Research Annual Meeting, August 13-15, 2018.

Individual Presentations

Tanabe P. Introducing the SCDIC.

Treadwell M. SCDIC Needs Assessment and Registry.

Hankins J. Implementation Research Studies.

2019

Calhoun C. Health Literacy in Adolescents and Adults with Sickle Cell Disease. ASH Annual Meeting, December 7-1, 2019.

Crego N. Barriers and Facilitators of Emergency Care for individuals with Sickle Cell Disease Living in Central North Carolina; The Patient Perspective. Black Communities Conference, September 9-11, 2019.

DiMartino L. Integration of mHealth Into the Care of Patients with SCD to Increase HU Utilization - mESH Study. Conference on the Science of Dissemination and Implementation in Health, December 4-6, 2019.

Hankins J. Hydroxyurea Adherence in Sickle Cell Disease. American Society for Pediatric Hematology/Oncology, May 1-4, 2019.

Harris K. The Relationship between Mental Health, Educational Attainment, Employment outcomes, and Pain in Sickle Cell Disease. ASH Annual Meeting, December 7-10, 2019.

Mendez G. Characterizing the Role of Social Determinants of Health in Affiliated and Unaffiliated Sickle Cell Patients. Foundation for Sickle Cell Disease Research, June 7, 2019.

Mendez G. Characterizing the Role of Social Determinants of Health in Affiliated and Unaffiliated Sickle Cell Patients in the SCDIC Registry. ASCAT, December 7-10, 2019.

Treadwell M. ASCQ-Me and PROMIS in the Sickle Cell Disease Implementation Consortium Needs Assessment: Follow-up. HealthMeasures Users Conference, June 5-6, 2019.

Treadwell M. The Sickle Cell Disease Implementation Consortium: Needs Assessment, Registry and Implementation Science Research Studies. NHLBI Sickle Cell Disease Research Annual Meeting, August 12-14, 2019.

2020

Calhoun C. Relationship Between Health Literacy and Cognition Amongst Adolescents and Young Adults with Sickle Cell Disease. American Society for Pediatric Hematology/Oncology, May 6-9, 2020 (Cancelled).

Gordeuk V. Hydroxyurea Use is Associated with Adverse Outcomes of Pregnancy in Sickle Cell Disease. ASH Annual Meeting, December 5-8, 2020.

Hankins J. Integration of mHealth Into the Care of Patients with SCD to Increase HU Utilization - mESH Study. Molecular Medicine Tri-Conference, March 1-4, 2020.

Hankins J. Rationale and Design of the Sickle Cell Disease Implementation Consortium (SCDIC). Molecular Medicine Tri-Conference, March 1-4, 2020.

Jacobs S. Identifying Barriers to Care to Develop Novel Recruitment Strategies for Individuals with Sickle Cell Disease. Conference on the Science of Dissemination and Implementation in Health, December 15-17, 2020.

Kanter J. Autoimmune Disease is Associated with Greater Risk of Co-Morbidity among Teens and Adults in the Sickle Cell Disease Implementation Consortium. European Hematology Association, June 11-21, 2020.

Knisely M. Severe Pain Profiles in Patients with SCD: A Duke Report. International Association for the Study of Pain World Congress, August 4-8, 2020 (Cancelled).

Masese R. Predictors of Maternal Morbidity and Perinatal Morbidity and Mortality Among Participants Enrolled in the SCDIC Registry. ASH Annual Meeting, December 5-8, 2020.

Masese R. Sex-Based Differences in Sickle Cell Disease: Report from the Sickle Cell Disease Implementation Consortium. ASH Annual Meeting, December 5-8, 2020.

Tanabe P, Hankins J, Lamont A, Kanter J, Treadwell M, Gordeuk V. Findings from the Sickle Cell Disease Implementation Consortium. NHLBI Sickle Cell Disease Research Annual Meeting, August 10-12, 2020.

Individual Panel Presentations

Tanabe P. Overview of the Sickle Cell Disease Implementation Consortium – SCDIC and a Protocol to Improve ED Care Using Individualized Pain Plans.

Hankins J. Early Findings from the Integration of mHealth into the Care of Patients with Sickle Cell Disease to Increase Hydroxyurea Utilization (mESH Study).

Lamont A. Moving the Needle in Sickle Cell Care: Expert Consensus on What Determines an Unaffiliated Patient.

Kanter J. Quality of Care Among Adolescents and Adults with SCD in the US: Analysis from the SCDIC

Treadwell M. Patient Reported Outcomes in the Sickle Cell Disease Implementation Consortium Registry.

Gordeuk V. Hydroxyurea is Associated with Miscarriage and Stillbirth.

DiMartino L. Implementation and Effectiveness of mHealth Apps for Improving Sickle Cell Disease Care During COVID-19: A Mixed-Methods Evaluation. Conference on the Science of Dissemination and Implementation in Health, December 14-16, 2021.

2022

Gibson R. Sickle Cell Disease Implementation Consortium. Global Congress on Sickle Cell Disease, June 16-18, 2022.

Gibson R, Chukwudozie B, Lawrence D, Reynolds B, Hsu L, Gollan S, Hankins J, Tanabe P, Parikh P, Ibemere S, Stevenson E. Findings from the Sickle Cell Disease Implementation Consortium (SCDIC-I). *Panel Session*. NHLBI Sickle Cell Disease Research Annual Meeting, August 8-10, 2022.

Individual Panel Presentations

Gibson R. Overview of the SCDIC.

Chukwudozie B, Lawrence D, Reynolds B, Hsu L. Transforming Sickle Cell Care - A Collaborative Journey: Value of a Community Stakeholder Advisory Board.

Gibson R, Gollan S. Lifetime Narratives from Unaffiliated individuals with SCD.

Hankins J. Multi-level Influential Factors of Hydroxyurea Adherence in Sickle Cell Disease.

Tanabe P. ALIGNing Expectations for the Treatment of VOE in the ED.

Parikh P. Evaluation of the Impact of COVID-19 on Individuals with Sickle Cell Disease in the U.S. Using Patient Reported Outcomes.

Ibemere S. High Body Mass Index in Adults with Sickle Cell Disease: A Report from the Sickle Cell Disease Implementation Consortium Registry.

Stevenson E. Fertility and Infertility Outcomes Among Males Females with Sickle Cell Disease in the SCDIC Registry.

Howell K. Burden of Health Outcomes Among Adolescents and Young Adults with Sickle Cell Disease. Foundation for Sickle Cell Disease Research, June 12-14, 2022.

2023

Hankins JS, Brambilla D, Potter MB, Kutlar A, Gibson R, King AA, Baumann AA, Melvin CL, Gordeuk V, Hsu L, Nwosu C, Porter J, Alberts NM, Badawy S, Simon J, Glassberg JA, Lottenberg R, DiMartino L, Jacobs S, Fernandez ME, Bosworth HB, Klesges LM, Shah N; the Sickle Cell Disease Implementation Consortium. Multi-level mHealth Intervention Boosts Hydroxyurea Adherence in Patients with Sickle Cell Disease. ASPHO Conference, May 10-13, 2023.