

# A new way to manage pain

Pinpoint™ An HPC and Klein Buendel collaboration





## About Pinpoint™

In partnership with Klein Buendel, parents and medical experts, HPC International, Inc. has developed Pinpoint<sup>™</sup>, an app for teens with SCD. NIH Small Business grants (SBIR) facilitated this effort in a classic form of publicprivate partnership. The study's Expert Advisory Board was formed by clinicians from institutions and nonprofit organizations including HOPE for SCD, UIC, Emory Healthcare, Children's National, Marquette University College of Nursing, and the International Association of Sickle Cell Nurses and Professional Associates.

- Using gaming technology, Pinpoint<sup>™</sup> is a mobile app that provides a safe, convenient tool for teens to learn about, track, assess, and communicate about their sickle cell pain with medical providers and parents.
- Pinpoint<sup>™</sup> offers an innovative Pain Assessment Tool and a Pain Diary to log physical and emotional pain symptoms related to their blood disorder and all with the touch of a finger to describe and assess the intensity, duration, quality, nature, and location of their pain and report it to their parents and physician
- Pinpoint<sup>™</sup> is a web app and works on any smartphone or smart mobile device
- Teens can play games, watch videos, learn preventive health tips, and visit the Patient Stories section with real stories and inspirational messages told by other sickle cell patients

# What is Sickle Cell Disease?

#### **Common Types of SCD**

- HbSS
- HbSC
- HbS Beta Thalassemia

Sickle Cell Disease (SCD) is the most common blood disorder in the U.S., and it is well known for the pain that it causes patients who are born with it. What isn't widely understood is the emotional stress that families go through due to the unpredictable episodes of pain, hospitalizations, risk of death, and more. SCD is an inherited blood disorder that disproportionately affects minority communities. Treatment options are few, and curative therapies like bone marrow transplant and gene therapy are promising, but not yet widely accessible. How to manage pain better is major challenge for patients with SCD, and to help combat that challenge, we have created a pain management app called Pinpoint<sup>M</sup>.



# How does it work?

Using gaming technology, Pinpoint<sup>™</sup> is an online mobile-friendly app that provides a safe, convenient tool for teens and even adult SCD patients to learn about, track, assess, and communicate about their sickle cell pain with medical providers and parents.

<u>Learn More</u>

## KEY FEATURES

#### Pain Assessment and Tracking

Pinpoint<sup>™</sup> offers an innovative Pain Assessment Tool that patients can use with the touch of a finger to track and assess their pain and other symptoms which then is stored in the Pinpoint Pain Diary.

#### Games

Patients can play games to learn SCD terminology and words that will help them to more specifically describe their physical and psychosocial pain symptoms when communicating with their parents and team of caregivers.

#### **Sharing Your Pain Reports**

Pinpoint<sup>™</sup> works on any smartphone or smart mobile device and pain assessment reports can be shared electronically with parents and/or providers through the app with the teen's consent.

## EDUCATIONAL CONTENT

### **Hope & Destiny Series**

The educational content in the Pinpoint app comes from the renowned and best-selling *Hope & Destiny* book series, written by leading clinical experts in hematology: James Eckman, MD; Lewis L Hsu, MD, PhD; and Allan Platt, PA-C, MMSc. Hope & Destiny is HPC International, Inc.'s premier educational book series on sickle cell disease, and access to much of this information is available through the Pinpoint™ app. Books in this series are tailored for different reader age groups including adults and parents as well as adolescent patients. Updated in new revised editions in 2023.



#### HOPE DESTINY

The Adult Patient and Parent's Guide to Sickle Cell Disease and Sickle Cell Trait Poviding the most accurate, physiciae-recommended

and age-appropriate information for parent caregivers, and adult patients coping with SCI

Allan F. Platt, PA-C, MMSc James Eckman, MD Lewis L. Hsu, MD, PhD

**Revised Sixth Edition** 

THE BEST-SELLING SICKLE CELL EDUCATION SERIES

## CLINICALLY EVALUATED



Market research, focus groups, surveys and interviews were conducted virtually and in-person with teens, parents and clinical specialists in communities across the country as part of the Pinpoint<sup>™</sup> research study recruitment. The initial prototype consisted of a Pain Assessment Tool, vocabulary game, body scanner reflection, educational self-disclosure activity, and excerpts from the *Hope and Destiny Jr.* book. Healthcare providers were interviewed on the app's acceptability and potential function within the clinical practice (n=4). Teens participated in cognitive interviews, focus groups, and usability testing (n=16), of which the average age was 14.5 + 1.3 years, 33.75% were female, and 50% were diagnosed with Hb SS (n=13).

The System Usability Scale (SUS), a validated tool for assessing the usability and acceptability of technological products, served as the primary outcome. The preliminary SUS score (n=5) was 82.5 (68% is "above average"), suggesting a high level of acceptability and usability among users. The Phase II study was completed in Dec 2021, and results were released in early 2023.

Research reported in this brochure was supported by the National Institute on Minority Health and Health Disparities of the National Institutes of Health under award numbers R43MD010746 and R44MD010746.

Source; Myers VH, Buller MA, Strickfaden S, Jerrod T, Hudson H, Lippert M, et. al. (2018, April). Pinpoint: Gaming technology to engage adolescent sickle cell patients in precision pain management. Poster presented at the annual meeting of the Society of Behavioral Medicine. New Orleans, LA. http://kbcollaboratory.com/category/annual-report/

### BUILT BY CLINICAL EXPERTS: KEY CONTRIBUTORS









#### Allan Platt, PA-C, MMSc

Allan Platt was the former Program Coordinator, and Physician Assistant at the Georgia Comprehensive Sickle Cell Center at Grady Health System. He is the current web designer of The Sickle Cell Information Center at www.SCInfo.org, and edits a monthly sickle cell newsletter via email on the latest research news that is distributed to 4,000 readers worldwide. Platt developed a PDA pain assessment tool and conducted pain assessment research. Platt is co-author of several sickle cell titles from Hilton Publishing.

#### Lewis L. Hsu, MD, PhD

Dr. Lewis Hsu is a pediatric hematologist dedicated to finding more cures for sickie cell disease and improving treatment and education

until cures can be found. He is currently Professor at University of Illinois at Chicago. He has 20 years of experience in leadership of some of the largest sickle cell programs in the country. He has over 100 peer-reviewed papers, mentored numerous

physicians and graduate students and contributed to 4 sickle cell websites devoted to patient education.

#### Deepika Darbari, MD

Dr. Deepika Darbari is a Pediatric Hematologist at Children's National Hospital and Professor of Pediatrics at George Washington University School of Medicine in Washington DC. with expertise in pain in sickle cell disease (SCD). Her work has contributed to improved understanding of pain in SCD and strategies to manage sickle cell pain including non-pharmacologic integrative modalities

#### Hilton Hudson, MD, FACS

Dr. Hilton Hudson is the Chief of Cardiothoracic Surgery at Franciscan Physicians Hospital. Dr. Hudson is also the founding President & CEO of HPC International, Inc. (HPC), a minorityowned business that specializes in the publication of SCD educational content. "I'm committed to seeing that every person, regardless of color or station in life, has access to the resources, information, and medical care they will need to live long, productive lives," said Hudson.

## BUILT BY CLINICAL EXPERTS: SPECIAL THANKS TO









Lisa Rose, M.Ed

Dora Clayton-Jones, PhD, RN, CPNP-PC

Carlton Dampier, MD, CPI

Julie Panepinto, MD, MSPH







Lauren Patrick, MS / Healthmonix

Talal Ali, MS, PhD

Zenaide (Zena) M. Quezado, MD

## PARENT ADVISORY BOARD MEMBERS

- Lisa Meatchem
- Marque Reed-Shackelford
- Myesha Soukup
- Oyewola Adeyinka
- Sameta Carpenter
- Shornita Shavers
- TaLana Hughes, MPH, Executive Director of SCDAI
- Tanya Anderson



### PINPOINT IN THE NEWS

#### **Publications:**

Hudson H, Hsu L, Lippert M, and Platt A. (2022) Promoting health equity in the publishing industry: 2 decades of investment in sickle cell, Journal of Sickle Cell Disease and Hemoglobinopathies. June 10, 2022, p. 129. https://www.fscdr.org/wp-content/uploads/2022/09/Sept19-Final-June-10-2022-JSCDH-Publication-combined\_2-combined-combined-combined\_1-2-combined-1.pdf

<u>MedCity News</u>, a leading digital healthcare outlet, featured a story about Pinpoint™ on August 14th, available here: <u>https://medcitynews.com/2023/08/app-sickle-cell-disease-teens/</u>

Healthcare IT Today, a leading digital health tech outlet, featured the Pinpoint™ app launch in a roundup of healthcare industry news (under the 'Partnerships' section) on August 17th, available here: <u>https://www.healthcareittoday.com/2023/08/13/bonus-features-august-13-2023-75-of-</u> <u>executives-thing-generative-ai-has-reached-the-point-where-it-will-reshape-healthcare-64-of-patients-would-trust-ai-over-a-doctor-to-make-a-di/</u>

Sickle Cell Disease News featured the Pinpoint<sup>™</sup> app launch on August 18th, available here: <u>https://sicklecellanemianews.com/news/new-app-sickle-</u> <u>cell-disease-helps-patients-manage-pain/</u>

LegalReader.com featured HPC's recent press release about Pinpoint™ in their Health & Medicine section on August 23rd, available here: <u>https://www.legalreader.com/hpc-international-launches-pinpoint-app-to-manage-pain-symptoms-associated-with-sickle-cell-disease/</u>

#### **Research / Grants:**

2018/09/19-2021/06/30 R44MD010746, National Institute on Minority Health and Health Disparities (NIMHD). PINPOINT: Gaming technology to engage adolescent sickle cell patients in precision pain management, Myers, Valerie H. (PI). This Phase II SBIR project aims to create Pinpoint, an interactive gaming tablet app that will be developed with the significant input of clinical experts to assist sickle cell disease teens with better identification and self-report of their pain. Role: Marketing & Research Assistant. Status: Completed 2021.

2016/01/13 – 2017/09/30 R43MD010746, National Institute on Minority Health and Health Disparities (NIMHD). PINPOINT: Gaming technology to engage adolescent sickle cell patients in precision pain management, Myers, Valerie H. (PI). This Phase I project aims to create Pinpoint, an interactive gaming tablet app that will be developed with the significant input of clinical experts to assist sickle cell disease teens with better identification and self-report of their pain. Role: Marketing & Research Assistant. Status: Completed 2017.

## How to Order

You can purchase online, or you can order Pinpoint<sup>™</sup> by emailing HPC at info@hpcinternationalinc.com or calling (219) 922-4868.

#### **Buy Individual**

You can purchase your own 1-year subscription to Pinpoint<sup>™</sup> directly from HPC for \$9.99 per year.

#### Buy Group

If you are a medical provider, you can purchase 1-year access to Pinpoint<sup>™</sup> for your patients and receive bulk pricing discounts.

25 patients = \$224.75 (\$8.99 ea) 50 patients = \$424.50 (\$8.49 ea) 75 patients = \$599.25 (\$7.99 ea) 100 patients = \$749.00 (\$7.49 ea)

## Contact Us

Check out our socials:



#### **EMAIL US**

info@hpcinternationalinc.com

#### **GIVE US A CALL**

(219) 922-4868

ADDRESS

5261-A Fountain Dr, Crown Point, IN 46307

#### https://home.hpcinternationalinc.com/pinpoint/