



# Developing Sickle Cell Disease Community Connections with **SCD** **Connect +**

## Students

- |                         |                   |
|-------------------------|-------------------|
| -Henam Singla           | -Alok Kumar       |
| -Lea Prade Njoua Dongmo | -Peterkings Jokoh |
| -Emmanuel Olanrewaju    | -Hafiz Usamma     |

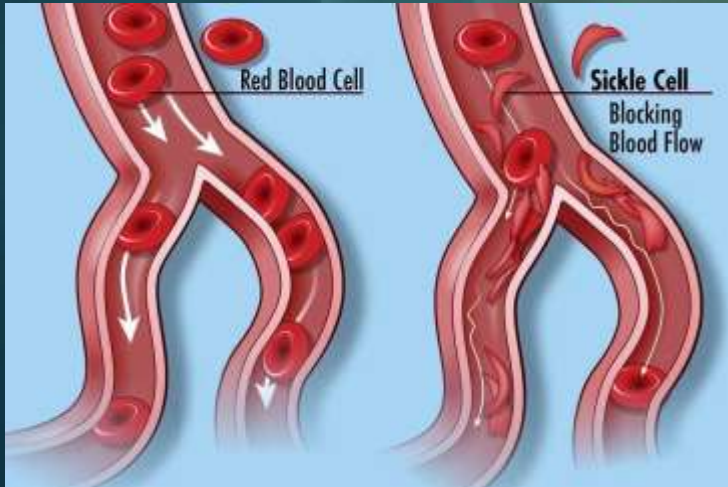


Advisors: Quenette Walton, Ph.D, LCSW; M. Mahbub Hossain, MBBS, MPH, DrPH

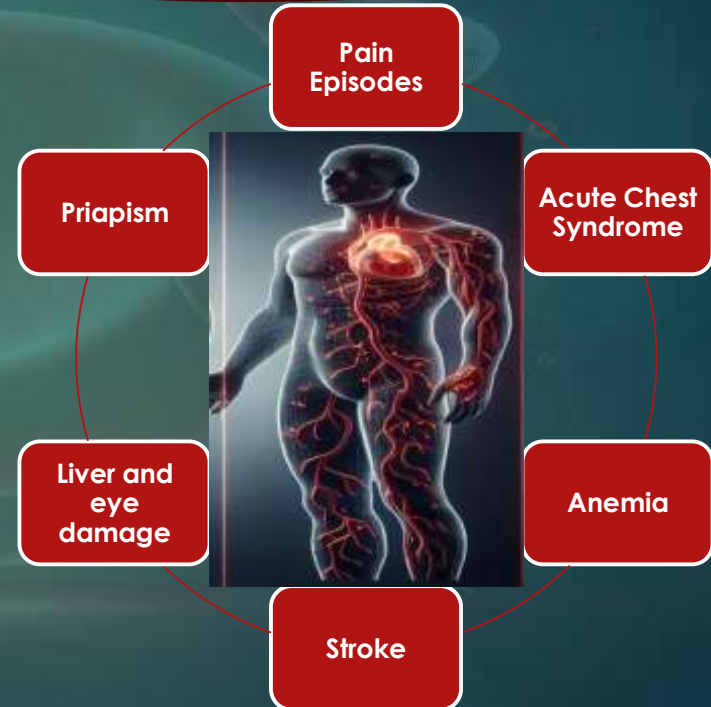
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# What is Sickle Cell Disease (SCD)?

**SCD** is an inherited blood disorder causing **C-shaped, sticky red blood cells**



## Clinical Manifestations



# Data Statistics on SCD



Multiple  
hospital  
stays per  
year



>75%  
no access  
to care



10,000/Child  
30,000/Adult



30%  
no follow-  
up care



25%  
declining  
grades



31%  
extra school  
programs

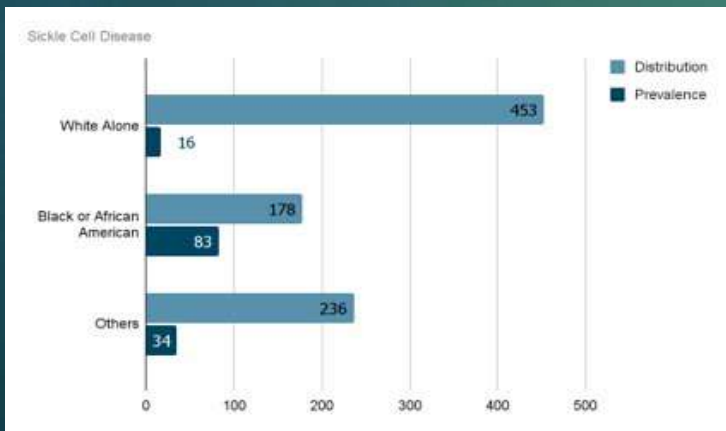
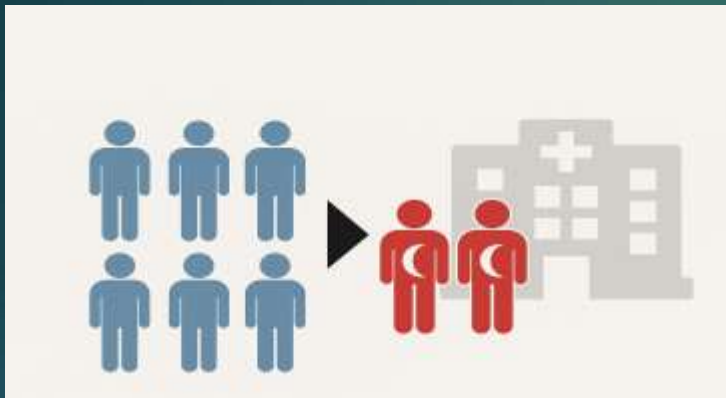


316  
specialized  
doctors



# Data Insights

National Survey of Children's Health (2019-2023)



## JUNE

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			<del>1</del>	<del>2</del>	<del>3</del>	<del>4</del>
<del>5</del>	<del>6</del>	<del>7</del>	<del>8</del>	<del>9</del>	<del>10</del>	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	30			

# Human Impact of Sickle Cell Disease

“By 2050, the number of people with SCD will increase by 30 %”



Willie Trill Cauley-Stein,  
NBA Player



Jourdan Dunn,  
British Model



Hertz Nazaire,  
Artist, Writer

# Data Mining

*Text-mining based analysis*  
based on **176 studies**

Interest in **Self-Management** among SCD patients

**Digital Resources**

**Timely and Continued** access to care

**Psychosocial Support**

**Shared Decision-Making**





# Problem statement

Barriers in access to care  
and lack of community  
engagement

AI-powered Digital  
Platforms

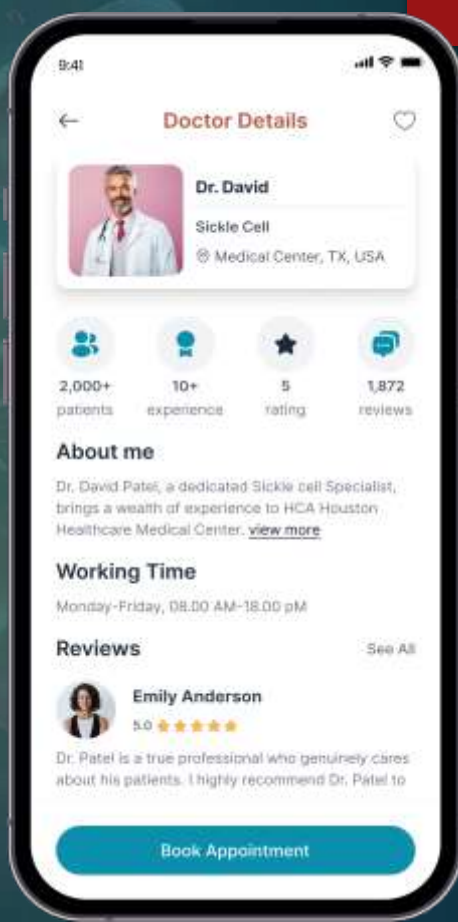


# The Big Picture

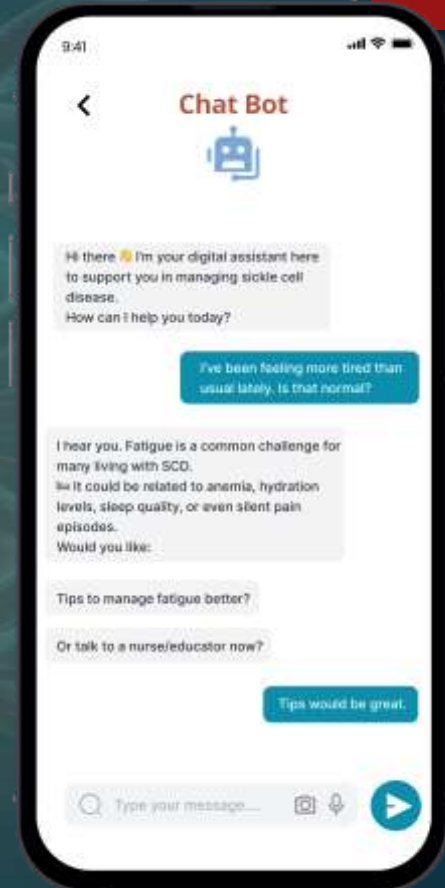
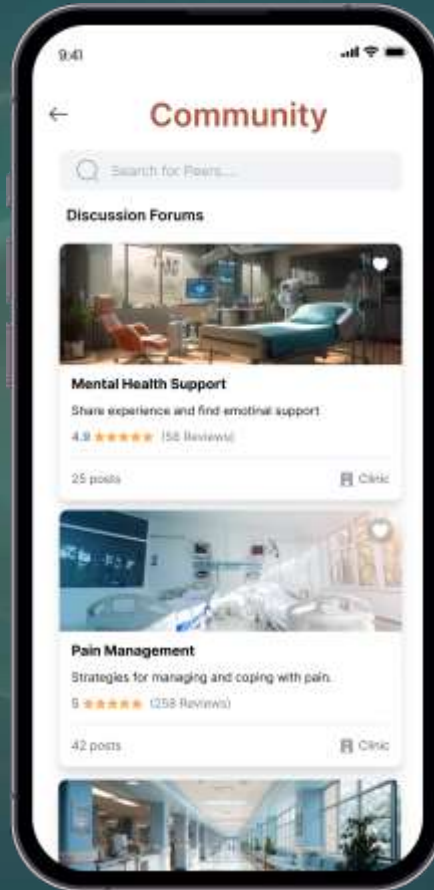
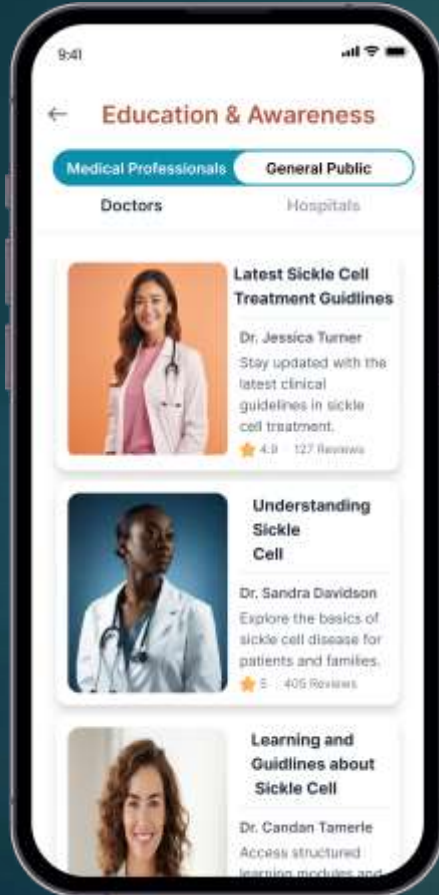




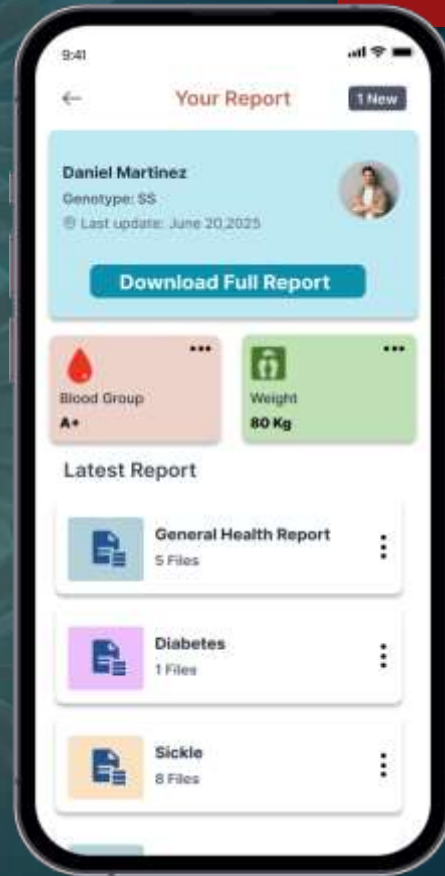
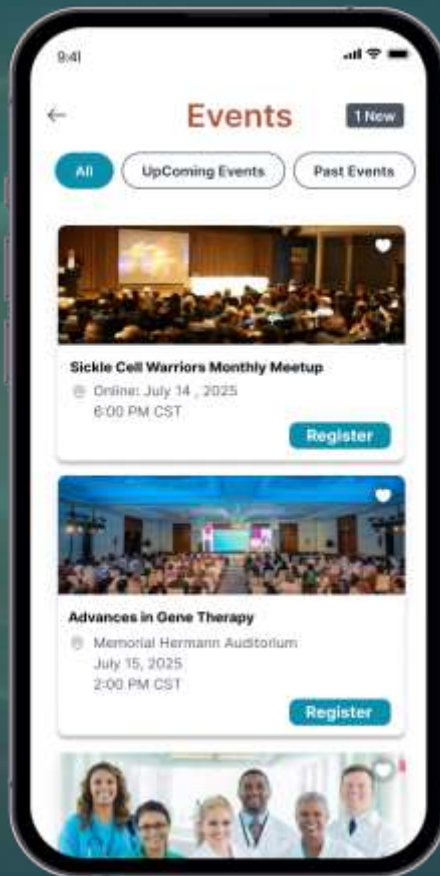
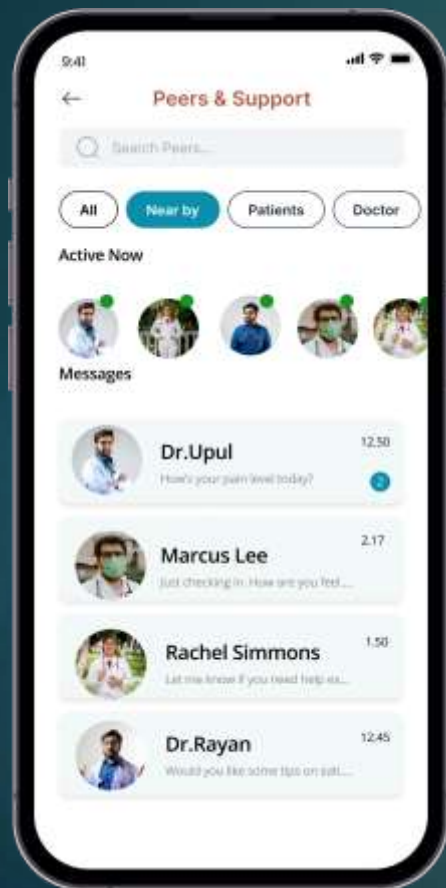
# SCD Connect + App



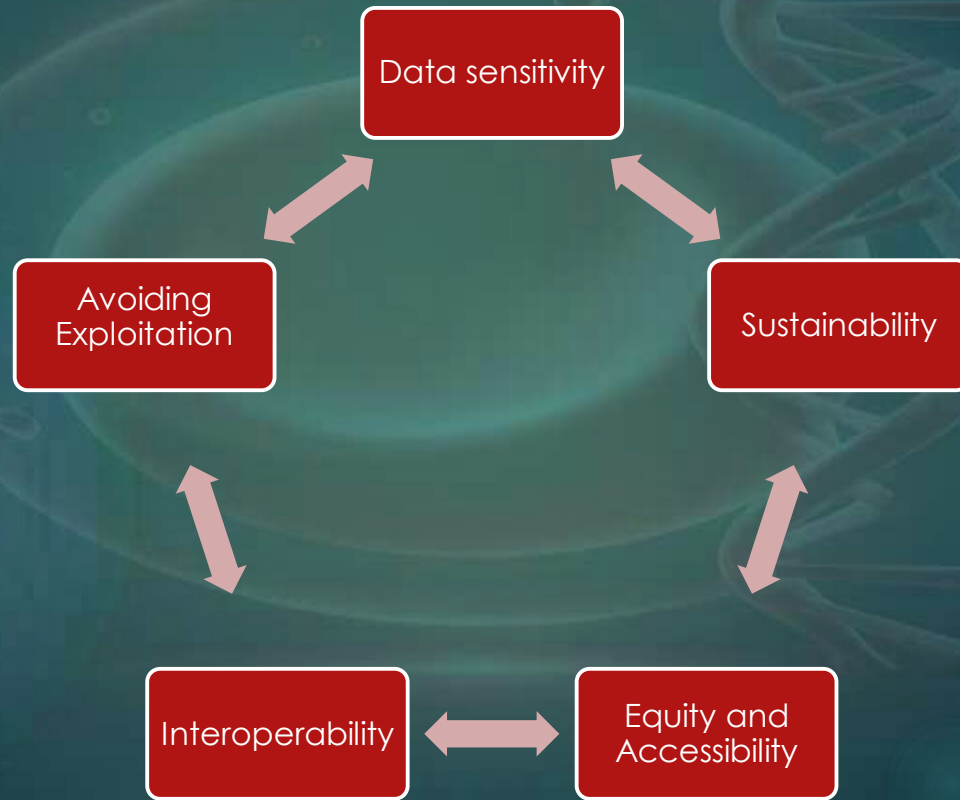
# SCD Connect + App



# SCD Connect + App

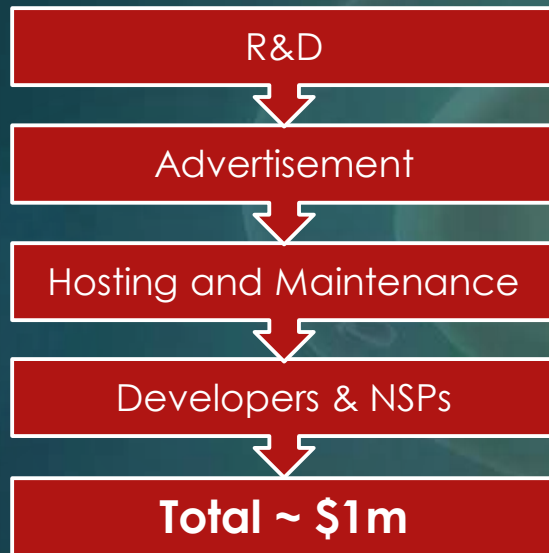


# Ethical and Operational Considerations



# Cost-Benefit Ratio

## Costs



## Revenue



For every \$1 spent, you get ~\$(8-11.7) return



This is more than a project;  
It is a life-saving opportunity.  
Will you be a catalyst for change?





# References

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# Cost Analysis

## R&D

- \$250,000

## Marketing

- \$200,000 with initial 10,000 users (pilot)

## Launch and Maintenance

- \$200,000

## Developers

- \$300,000



**Total Cost: ~\$1 Million**

# Revenue Stream

## Hospital Partnerships

- $\$350/\text{user} \times 10,000 \text{ users via care contracts} = \$3,500,000$

## Doctor Subscriptions

- $\$25/\text{month} \times 1,000 \text{ doctors} \times 12 \text{ months} = \$3,000,000$

## Event Sponsorships

- $100 \text{ sponsored campaigns} \times \$15,000/\text{event} = \$1,500,000$

## Pharma Companies

- $\$120/\text{user} \times 10,000 = \$1,200,000$



## Other Benefits:

- Savings in ER
- Hospital Savings

**Total Revenue: ~\$8-11.7 Million**