



2022 LEAD Capstone Poster Session

Transitioning from Good to Great: A Vision for the Next Level of Sickle Cell Care

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Abstract

- Pediatric to adult transfer is a period of care noted to have increase mortality in patients with sickle cell disease (SCD).¹
- Transition Programs are felt to be a good way to address this national crisis for these high risk patients.
- A recent consensus on essential criteria of SCD programs provide some guidance and endorse development of dedicated SCD centers.²
- Innovative care models are needed ensure safe, accessible, equitable, experienced care continuity while addressing ongoing healthcare disparities for patients with SCD.



Objectives

- Describe the UT Southwestern Medical Center (UTSW) landscape of current care for patients with sickle cell disease (SCD)
- Identify strengths and weaknesses of the current care model
- Propose alternate care model
- Identify stakeholders for this initiative



Background Information

- SCD is a blood disorder that has severe medical complications of every organ system.
- Average life expectancy for patients with the most common genotype is significantly shortened compared to unaffected comparator groups.³
- Access to comprehensive, multidisciplinary experienced care is lacking, particularly for adult patients which likely contribute to the poor outcomes.²
- UTSW has experienced pediatric and adult SCD programs with a focused Transition Program.



Background Information

- Despite the advantage of having a SCD Transition Program, care access remains a challenge and cost of care for young adults remains excessive. National estimates exceed \$2 billion annually due to high Emergency Department and inpatient admissions.⁴
- UTSW is primed to be a leader in the creation of a unique alternate care model aimed to improve quality of care, care access and decrease ED/inpatient admissions.
- Currently, there are other clinics attempting to create Lifespan Clinics but none with the UTSW advantage of dedicated pediatric and adult teams.



Project Plan

- Identify Potential Stakeholders:
 - Rare Disease Center of Excellence-UTSW earned designation in 2021 by the National Organization of Rare Disorders (NORD)
 - UTSW, Parkland and Children's Health Leaders in:
 - ✦ Quality
 - ✦ Hospital
 - ✦ Ambulatory
 - ✦ Diversity
 - UTSW and Children's partnership in building new pediatric hospital that are geographically connected
 - Informatics to streamline Epic communications within the electronic medical record since all use this similar platform



Project Plan

- Create a SCD Multidisciplinary Lifespan Clinic to meet the care needs starting in pediatrics through adulthood
- Anticipated benefits:
 - Streamline communication and workflow between the experienced SCD teams
 - Improve quality of care and decrease healthcare inequities/disparity
 - Decrease excessive cost of care to the participating organizations
 - Remove the potential of “losing” patients during the “transfer of care” since the care remains in same geographic location
 - Consolidate the resources currently allotted to pediatric and adult SCD programs



Application of What You Learned at LEAD

- Identify how my work aligns with UTSW mission
- Identify and engage collaborators
- Understand how my work may affect other initiatives or considerations of my immediate supervisors (i.e. competing interests) when presenting a proposal



Innovation and Significance

- This is a proposal of true innovation within the UTSW Medical Center as no such structure currently exists.
- UTSW could be a national leader to show success in such a model that is not described elsewhere for advancing the care of patients with SCD.
- Success of a SCD Lifespan Clinic can be a model for other complex rare diseases that face similar challenges (e.g. congenital heart or cystic fibrosis patients).



References

1. Quinn CT, Rogers ZR, McCavit TL, Buchanan GR. Improved survival of children and adolescents with sickle cell disease. *Blood*. 2010 Apr 29;115(17):3447-52. doi: 10.1182/blood-2009-07-233700. Epub 2010 Mar 1.
2. Kanter J, Smith WR, Desai, PC, et al. Building access to care in adult sickle cell disease: Defining models of care, essential components, and economic aspects. *Blood Adv*. 2020;(4)16:3804-13.
3. Lanzkron S, Carroll CP, Haywood C Jr. Mortality rates and age at death from sickle cell disease: U.S., 1979-2005. *Public Health Rep*. 2013;128(2):110-6.
4. Lanzkron S, Carroll CP, Haywood C Jr. The burden of emergency department use for sickle-cell disease: an analysis of the national emergency department sample database. *Am J Hematol*. 2010;85(10):797-799.