



“PATHS GRANT: Using the Hub and Spoke Model to Improve Access to Care for Adults Living with Sickle Cell Disease”

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INTRODUCTION

Sickle Cell Disease (SCD) is an inherited blood disorder that occurs in 1 out of every 365 African-American births¹. It is a complex, chronic, multisystem disease and requires expert medical care throughout the lifespan. There is a lack of clinicians with the expertise to care for people living with SCD¹. The *Prince George's County Access To High-quality Sickle cell care* (PATHS) project aimed to create a Hub and Spoke model to provide expert SCD treatment in the Maryland County with the highest number of people living with SCD. This County is about an hour from any existing comprehensive sickle program in the State.

AIM

- Improve outcomes for patients seeking care for acute vaso-occlusive episodes (VOEs) in Prince George's County (PGC).
- Provide access to expert outpatient sickle care close to where patients live.

METHODS

Multi-Site Implementation study

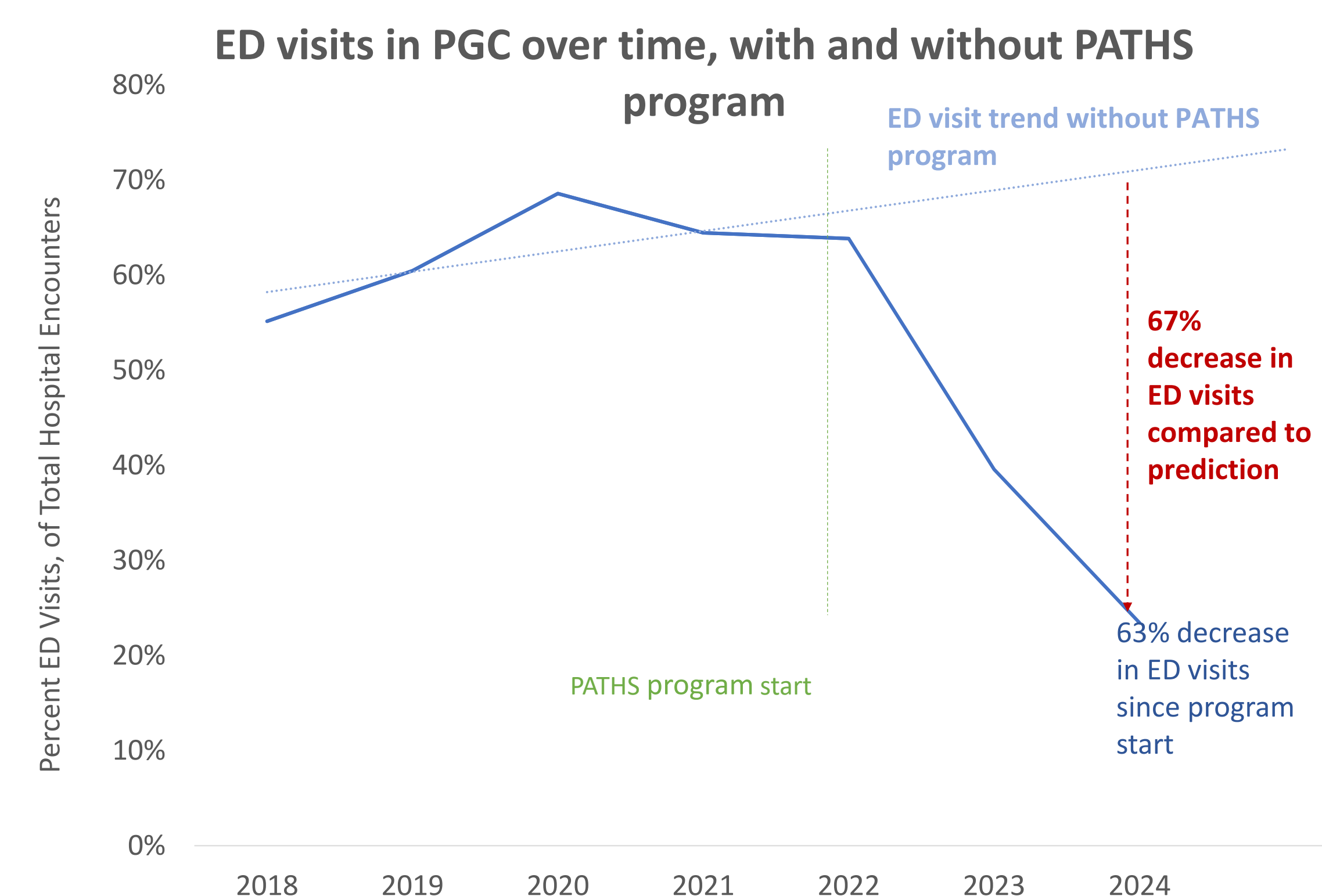
- Infusion center (IC) at a community hospital (spoke) in PGC
- Well-established comprehensive sickle cell center (hub)
- Community Based Organization for resources to address social determinants of health (SDOH)

Spoke hospital (University of Maryland Capital Region)

- Part-time palliative care physician and full- time advanced practice provider
 - Acute care in IC
 - Inpatient consultation
 - Weekly routine follow-up clinic
- Nurse and front desk staff for the 6 chair IC open weekdays from 9am-5pm

RESULTS

- From 2022 to 2024, 174 adult patients with SCD received care at the spoke.
- A dedicated SCD IC opened at the spoke in March 2023.
- From March 2023- June 2024 there were 949 encounters to the IC.
 - 636 of those visits were acute care infusion visits.
 - 13 visits resulted in hospital admission (2%).

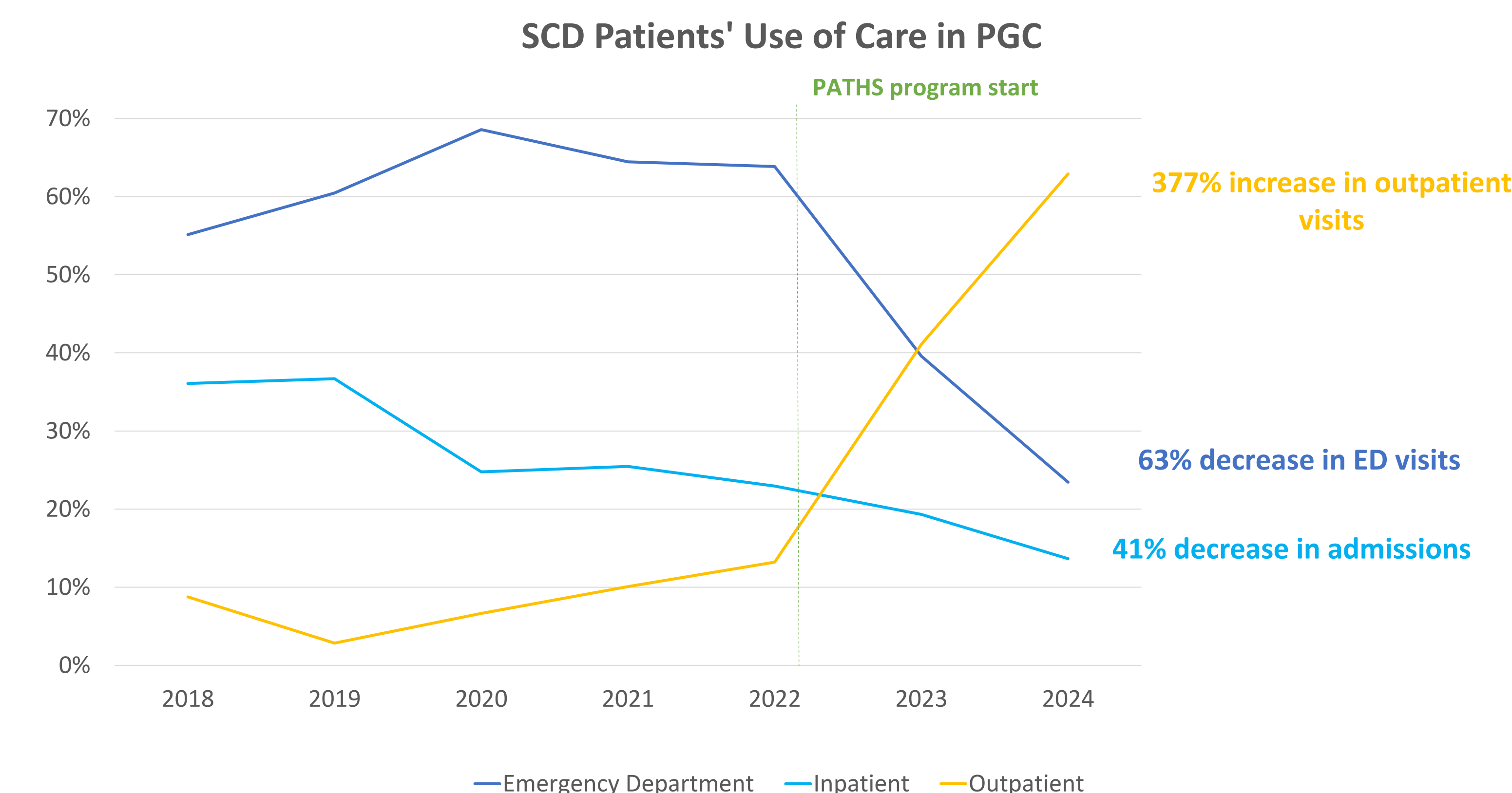


Outpatient Utilization:

- Outpatient visits (including IC visits) for SCD among PGC residents within their county increased by 377%
 - From 61 in 2022, to 200 in 2023, and projected 500 outpatient visits in 2024

Hospital Admissions:

- In comparison of data prior to opening the IC (data from 2018) to 2 years after opening the IC in 2024 there was a 41% decrease in inpatient admissions for county residents with SCD in county hospitals without corresponding increase in hospitalizations outside the county.



CONCLUSIONS

The hub and spoke model is an efficient way for the hub to extend its clinical reach to meet the needs of adults living with SCD in underserved areas of the US.

Future evaluations will examine whether this model leads to an increase in use of appropriate disease modifying therapy.

REFERENCES

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