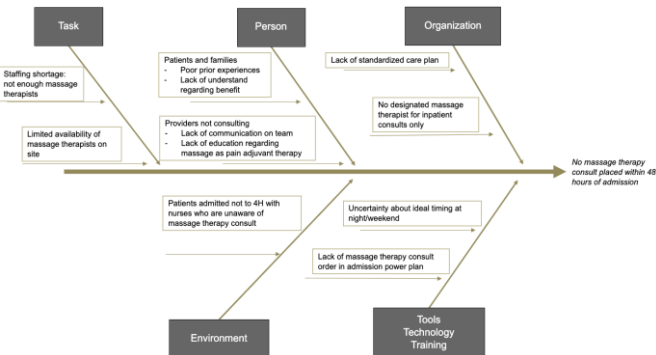


## INTRODUCTION

- Patients with sickle cell disease (SCD) often experience painful vaso-occlusive episodes (VOEs) requiring prolonged hospitalizations.
- Addition of non-pharmacologic treatments, such as massage therapy, have improved pain control and decreased length of stay (LOS).
- Review of VOE admissions for patients with SCD at Children's Mercy Hospital from January 1, 2023 to December 21, 2023 found 79% had a massage therapy consult placed within 48 hours of admission with a median number of 3.0 days from admission to consult note.

## METHODS

- Primary aim to decrease time from admission to massage therapy completion to 1.5 days by May 31, 2024. Secondary outcome measure to decrease LOS from 5.0 to 4.0 days.
- Process measure to increase consults ordered within 48 hours of admission from 79% to 95%.
- Balancing measure monitored percentage of incomplete consult notes (as a sign of effect on workload) to remain stable at 31%.



# DECREASING LENGTH OF STAY FOR SICKLE CELL PAIN ADMISSIONS BY INCREASING MASSAGE THERAPY CONSULTATIONS



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## RESULTS

- PDSA cycle #1 starting 12/22/2023: admission orders for VOE are updated to include automatic massage therapy consult orders.
- Review of PDSA cycle #1 through 03/31/2024, median days from admission to consult completion decreased slightly to 2.7 days on average, though LOS did not significantly change.
- Over these three months, the average percentage of massage therapy consults placed within 48 hours of admission increased to 96%.
- Incomplete massage therapy consults decreased from baseline to 19% on average.

## CONCLUSION

- Our goal is to decrease LOS for patients with SCD admitted for VOE by increasing the completion of massage therapy consults. PDSA cycle #1 led to an increase in massage therapy consults placed within 48 hours but did not change either the time from admission to consult completion nor LOS.
- Future interventions to improve massage therapy consultation will require collaboration with massage therapists to identify barriers to consult completion and educating provider teams on the importance of adjunctive pain therapies.

## REFERENCES

1. Brandow AM, et al. American Society of Hematology 2020 guidelines for sickle cell disease: management of acute and chronic pain. *Blood Adv* 2020; 4(12): 2656–2701. doi: <https://doi.org/10.1182/bloodadvances.2020001851>
2. Bodhise, PB, et al. Non-pharmacologic Management of Sickle Cell Pain. *Hematology* 2004, 9(3), 235–237. <https://doi.org/10.1080/10245330410001701495>
3. Crawford C, et al. The Impact of Massage Therapy on Function in Pain Populations-A Systematic Review and Meta-Analysis of Randomized Controlled Trials: Part I, Patients Experiencing Pain in the General Population. *Pain Med*. 2016;17(7):1353-1375. doi:10.1093/pm/pnw099
4. Welch-Coltrane JL, et al. Implementation of Individualized Pain Care Plans Decreases Length of Stay and Hospital Admission Rates for High Utilizing Adults with Sickle Cell Disease. *Pain Med* 2021; 22(8):1743-1752. doi: 10.1093/pm/pnab092