



## ABSTRACT

**Purpose:** The aim of this research project is to understand how long patients are waiting to be seen to have dental rehabilitation completed under general anesthesia at Children's Mercy Hospital. The data will help determine if additional surgical blocks are needed for dental providers to serve the patient population in a more reasonable time frame. **Methods:** A retrospective review of all appointments in the CMH dental clinic was conducted for all patients referred for general anesthesia. Data collected included patient wait times, patient age, ASA (American Society of Anesthesiologists) classification, type of appointment in which GA referral was made, and if the patient had previously undergone dental rehab under general anesthesia. **Results:** Data analyzed included only patients seen at CMH for dental rehabilitation. Most referrals were patients of ASA III+ classification between 4 and 7 years old. Most were also being seen for dental rehabilitation under GA for the first time and waited between 6 and 12 months for treatment. **Conclusion:** Results show need for expansion of internal dental surgical capacity at CMH. Increasing the number of internal surgical blocks or establishing a dental surgery center could greatly decrease surgery wait time and increase the number of patients seen for dental rehabilitation.

## BACKGROUND/INTRODUCTION

Per the AAPD, GA is utilized with goals of providing safe, efficient dental care; eliminating anxiety and untoward movements or reactions during procedures; minimizing pain; and facilitating treatment of mentally, physically, or medically compromised patients. GA is particularly useful in cases of severe early childhood caries and special health care needs. Children's Mercy Hospital dental clinic in Kansas City provides comprehensive care to children with and without SHCN. Treatment options can include nitrous oxide and conscious sedation, but a large population require more advanced behavior guidance with GA. Due to more patients requiring GA for treatment, wait times are increased. Longer wait times lead to adverse outcomes such as more teeth requiring treatment, increased pain, and more pre- and post-operative appointments. This study is designed to evaluate wait times for dental rehabilitation under GA, in order to determine the need to increase dental surgical capacity at CMH.

## MATERIALS/METHODS

Data was collected and based upon patient appointments and treatment notes at the Children's Mercy dental clinic from January 1, 2024 to June 30, 2024. This project was reviewed and determined to not meet the criteria for human subjects research by the institutional IRB. Patient demographics- such as patient age and ASA, wait time from referral to GA treatment, and repeat dental rehabilitation- were recorded in Microsoft Excel. Data analysis: Descriptive statistics were used to compare GA needs across our given population at the CMH dental clinic.

## RESULTS

A total of 254 patients were seen for dental rehabilitation under general anesthesia at Children's Mercy Hospital over a 6-month period.

- Most patients (65%) were classified as ASA III+.
- Most patients (54%) were between 4 and 7 years old at time of request for GA.
- Only 18% had been seen for dental rehab under GA prior.
- Wait time outcomes:
  - 40% of patients were seen in 6 months or less.
  - 45% of patients were seen in 6-12 months.
  - 15% of patients were seen greater than 12 months after GA requests were placed.

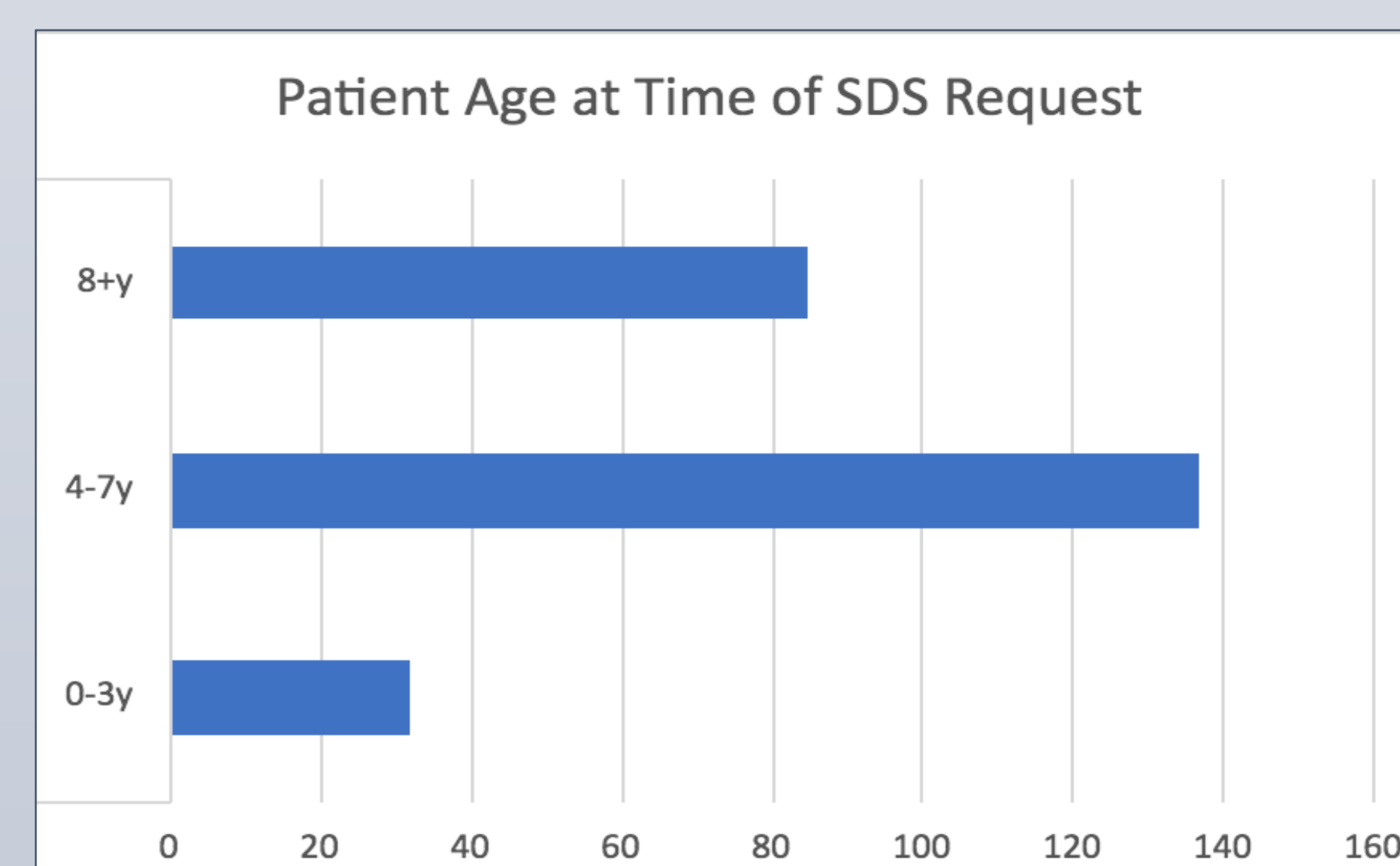


Figure 1. Patient age of GA Request

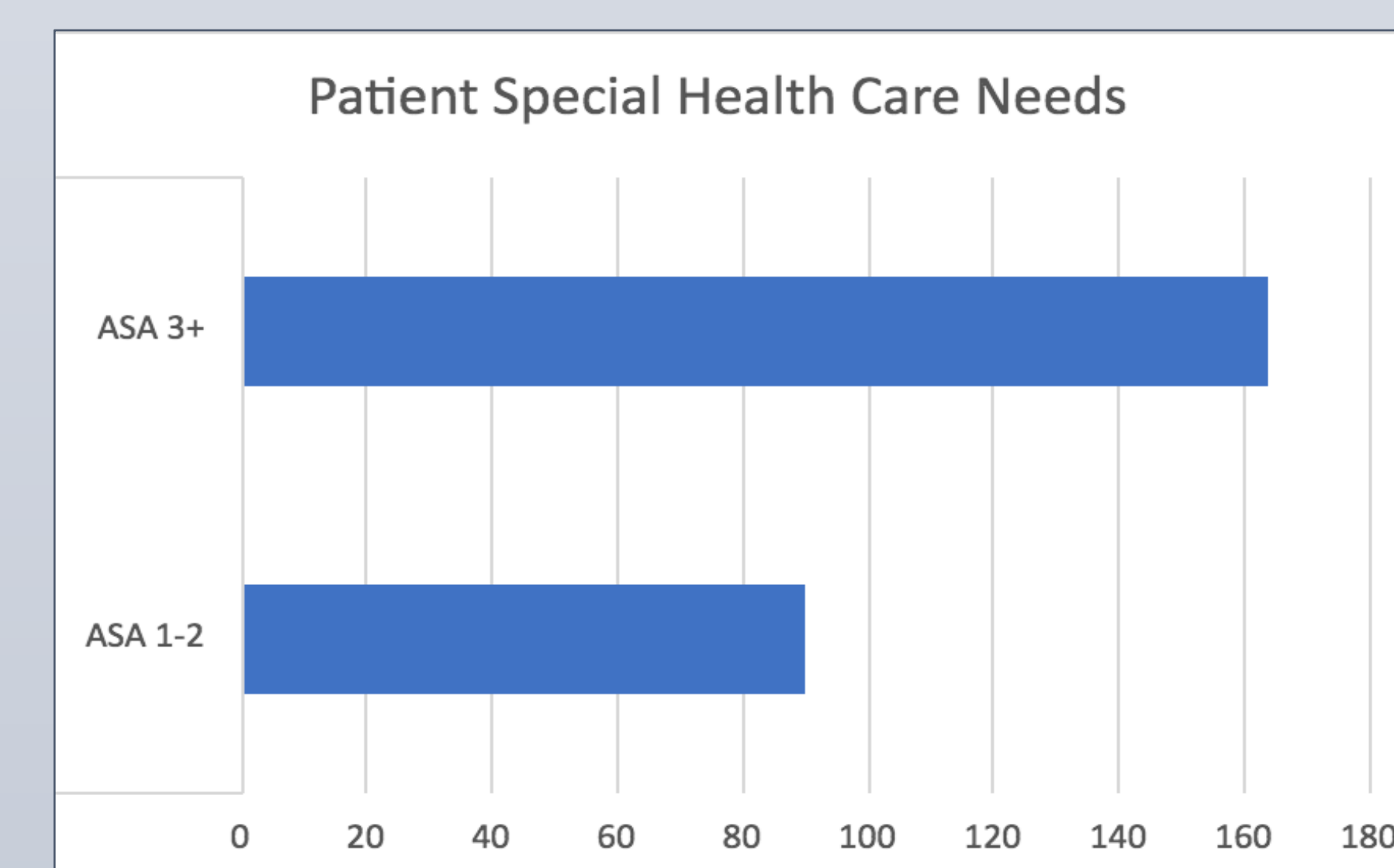


Figure 2. Patient ASA Classification

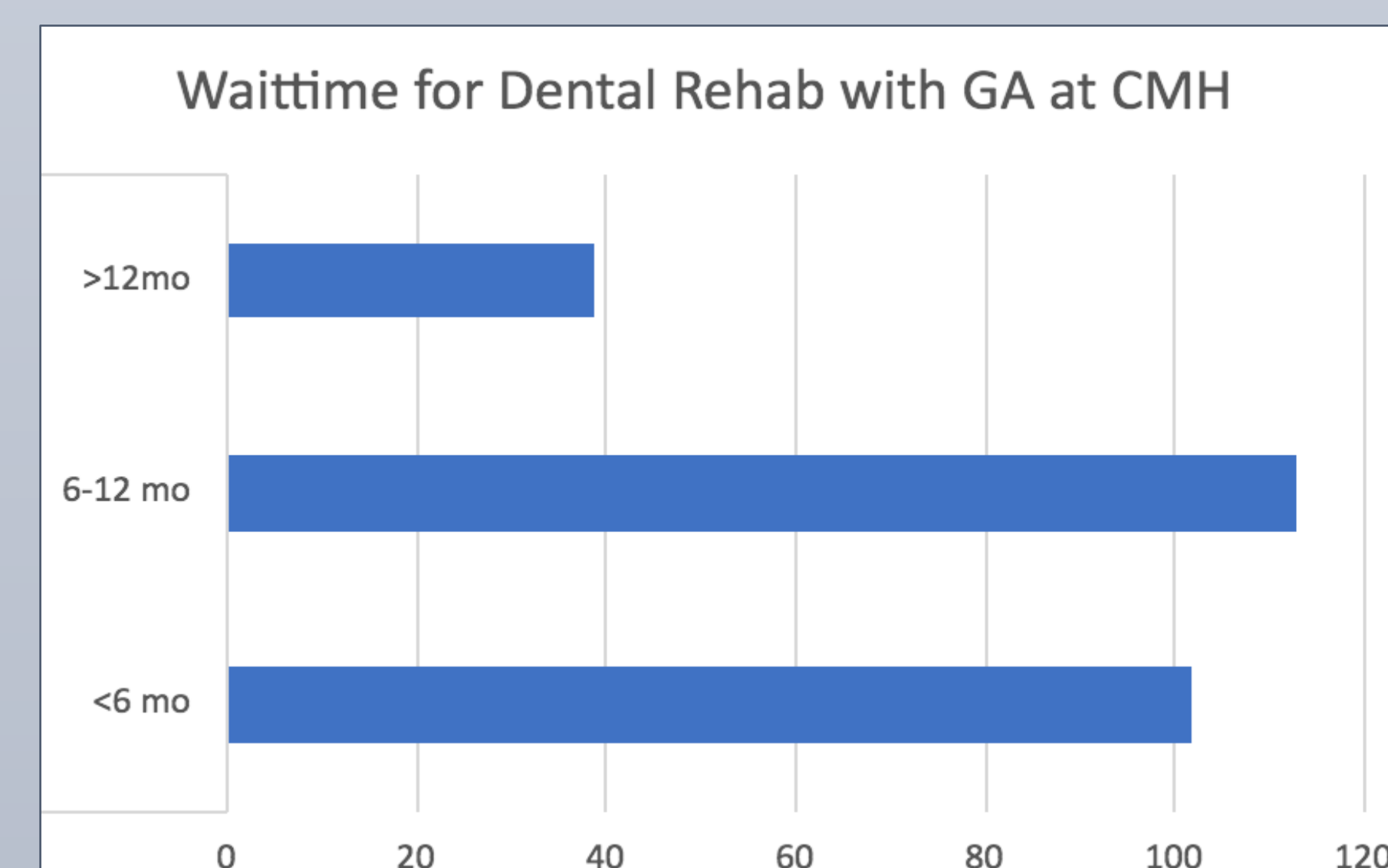


Figure 3. Wait time for GA

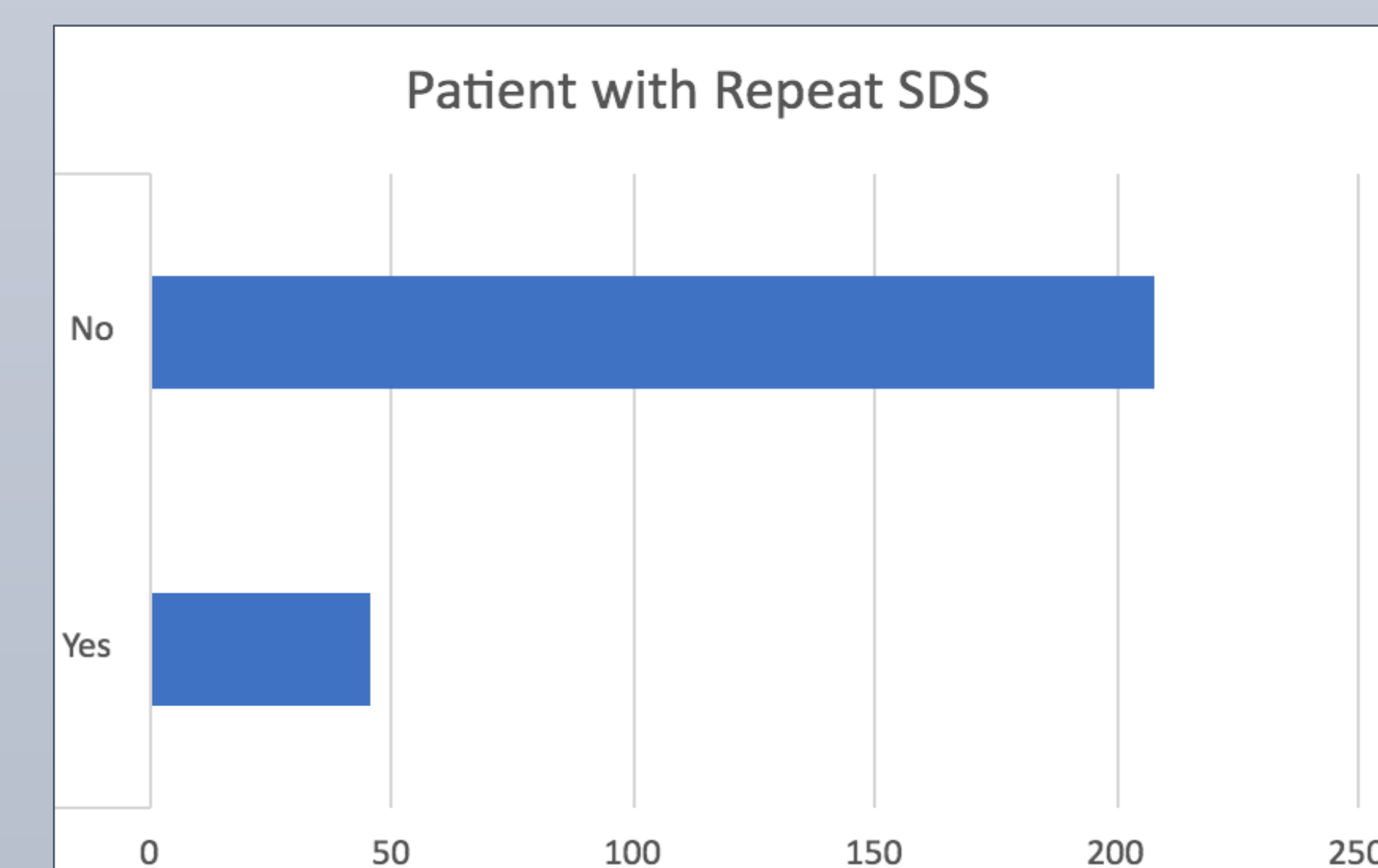


Figure 4. Patient Repeat GA

## DISCUSSION/CONCLUSION

Dental rehabilitation under general anesthesia in a hospital setting is a necessary treatment modality for a variety of reasons, including patient medical complexities, young age, rampant decay, insurance coverage, and urgency of treatment needs for things such as cardiac or transplant clearance. Pediatric patients seen in the Children's Mercy dental clinic often present with extensive treatment needs and are faced with long wait times to be seen for dental rehabilitation in the hospital setting. Reasons for these long wait times include high demand for GA and high patient volume, limited operating room availability, and limited allotted times for dental procedures. Since the average wait time is 6-12 months between initial referral to GA and the date of treatment, many patients experience much more significant treatment needs than initially planned due to caries and disease progression.

The findings of this project show the need for more surgical capacity for dental rehabilitation in the OR setting at CMH. By increasing the number of internal surgical blocks or establishing an external dental surgery center, there could be a significant decrease in patient wait time and an increase in the number of patients seen for treatment.

## REFERENCES

1. American Academy of Pediatric Dentistry. Behavior guidance for the pediatric dental patient. The Reference Manual of Pediatric Dentistry. Chicago, IL: American Academy of Pediatric Dentistry; 2025:379-99.
2. Carmona-Santamaría M, Pérez-Sánchez D, Aura-Tormos JI, Guinot-Barona C, Marqués-Martínez L, García Miralles E. Utilization Patterns and Clinical Indications of General Anesthesia in Pediatric Dentistry: A Systematic Review. *Children*. 2026; 13(3):422. <https://doi.org/10.3390/children13030422>
3. Okuji DM, Lin J. Predicting Negative Outcomes While Awaiting Dental Treatment Under General Anesthesia. *J Dent Child (Chic)*. 2021;88(1):3-10