

Failed General Anesthesia Appointments in a Pediatric Dental Residency Program

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BACKGROUND

General anesthesia is used to provide dental care to pediatric dental patients when basic behavior guidance or other pharmaceutical interventions are not adequate. GA can protect a patient's psyche and ensures the health and safety of both the patient and the dental team. While highly effective, pediatric dental GA requires specialized equipment, dedicated dental and anesthesia providers, and additional scheduling and surgical staff. It is therefore very resource intensive.

When caregivers fail to keep appointments, children experience delay in treatment and healthcare facilities experience financial loss. Therefore, determining factors that affect patient attendance to GA visits has the potential to improve patient outcomes and reduce healthcare cost.

PURPOSE

The objective of this prospective study was to investigate factors associated with attendance to general anesthesia appointments at an outpatient dental surgery center associated with the University of Washington Pediatric Dentistry Residency program.

The findings will be implemented to develop new processes to minimize barriers to care.

METHODS

The study sample included all patients under age 21 who were scheduled for comprehensive dental care under general anesthesia at the University of Washington Center for Pediatric Dentistry during the period of December 1, 2022 to December 1, 2023. Variables of interest were identified prior to initiation of the study, and data was collected prospectively through direct entry by clinic staff and extraction from the electronic health record.

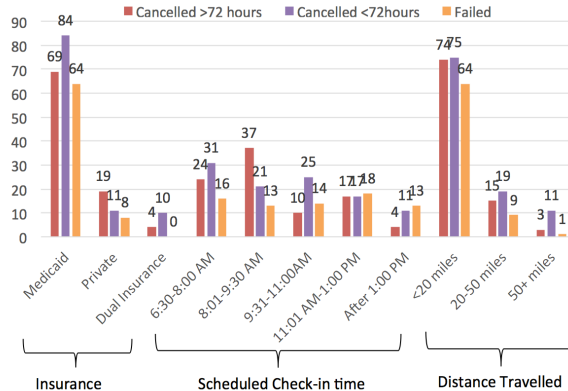
Demographic information (including race, gender, sex, age), insurance type, use of an interpreter, caregiver primary language, time elapsed between consultation/GA treatment day, scheduled check-in time, zip code, and most importantly- reason for cancellation were collected.

Appointments were categorized as kept (attended), cancelled within seventy-two business hours, cancelled with more than seventy-two business hours of notice, or failed (if the patient was confirmed but did not arrive for their scheduled appointment). Broken appointments were identified as any of the three categories of unkept appointments.

RESULTS

A total of 543 patients completed GA. 92 cancelled with >72 hours notice, 105 cancelled with <72 hours notice, and 74 failed (no-show) to keep their appointment (12%). There was not a statistically significant association between attendance and gender or language. Patients aged between 6-11 years, with Medicaid insurance, the earliest check-in time (6:30-9:30 AM), and shortest distance travelled to clinic (<20 miles) were less likely to keep appointments. The most frequent reasons for late cancellation or no-show were patient or family illness (53%), fasting violation (4.4%), change in medical status (4.4%), insurance/finances (3%), and transportation issues (1.8%).

Distribution of Appointments



DISCUSSION

- A high percentage of patients scheduled for GA in this study cancelled with short notice or no-showed for their appointments.
- Amongst the study population, anesthesia-related factors such as illness and fasting violations impacted attendance the most.
- In this study, scheduling staff were able to fill 90% of appointments when provided with >72 hrs notice. However, when given less advance notice that rate dropped to approximately 50%. Similarly, the vast majority of late notice cancellations were due to patient illness. Therefore, emphasis should be placed on educating caregivers about criteria for cancellation due to URI early-on when scheduling and repeatedly during the confirmation process. This will allow sufficient time to fill vacancies and improve the rate of GA completion.
- The majority of unkept appointments occurred amongst children aged 6-11 years old (51.6%). Younger patients were given earlier appointments and patients with prolonged NPO times kept their appointments less frequently. Scheduling patients earlier in the morning and minimizing time elapsed between consult and GA appointment may improve kept appointments by minimizing fasting time and helping minimize chance of contracting illness.
- High anesthesia fees were the #1 reason for cancellation for patients with private insurance. In-depth financial counseling and partnering with social work may decrease late cancellation in this population.

These findings may be used to improve processes increasing accessing to oral health care among children and adolescents in need of dental treatment under general anesthesia.

CONCLUSION

- Appointment failure was primarily related to illness and fasting violation.
- The time elapsed between consultation and GA appointment was higher for broken appointments than for kept.
- Age, time of check in for GA appointment, type of insurance, and geographical area of residence were statistically significant with failed appointments.