



# Demographic Shift of Pediatric Patients Requiring Treatment under General Anesthesia

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## PURPOSE

To evaluate changes in patient populations that underwent dental rehabilitation under general anesthesia (DRGA) at an urban children's hospital before and after the COVID-19 pandemic.

## BACKGROUND

In patients with limited cooperation, extensive dental treatment and/or special health care needs, DRGA is a common treatment modality<sup>1</sup>.

Due to limited access to operating rooms (OR) during the COVID-19 pandemic<sup>2</sup>, the ability to take pediatric dental patients to the OR was severely limited.

Understanding which patient populations requiring DRGA were most affected by the COVID-19 pandemic and its associated changes in dental care delivery will enable the adoption of interventional strategies, such as minimally invasive dentistry, in these at-risk populations.

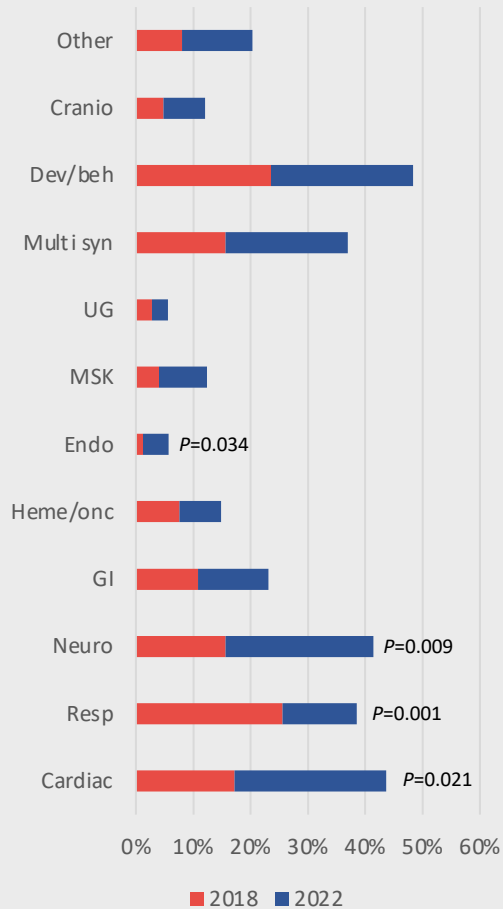
## METHODS

A retrospective chart review was completed for patients who underwent DRGA between January 1, 2018, and December 31, 2018, as well as January 1, 2022, and December 31, 2022. Dental electronic health records were reviewed to extract the following data: date of birth, sex, age at time of surgery, and medical history.

Descriptive statistics and chi-square tests were completed. Statistical significance was set at a *P*-value of 0.05.

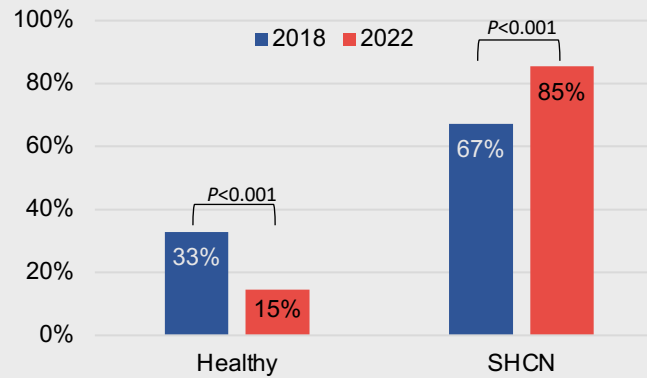
## RESULTS

### SHCN Patient Diagnoses by System

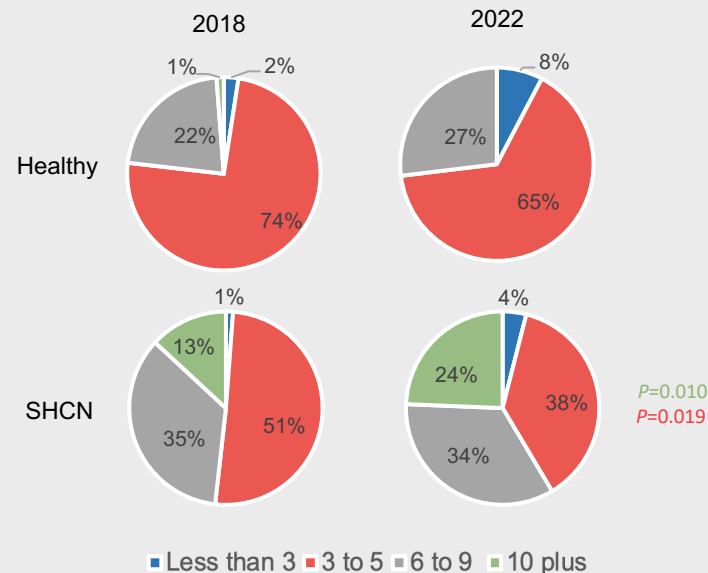


	Total	Healthy	SHCN
2018	N=250	n=82	n=168
2022	N=178	n=26	n=152

### Health Status of Patients Undergoing DRGA



### Age of Patients Undergoing DRGA



## DISCUSSION

The reduced number of healthy children who underwent DRGA in 2022 relative to 2018 may reflect the expansion of alternative dental techniques during the pandemic, such as minimally invasive dentistry, and greater utilization of outpatient surgery centers.

Though MID is beneficial for patients with SHCN<sup>3</sup>, many of these patients are medically complex, which may reduce a clinician's confidence in relying on MID as definitive treatment. This combined with access to care issues, faced in particular by adolescents with SHCN<sup>4</sup>, created an older population of patients requiring DRGA in 2022.

The increase across almost all categories of SHCN patient diagnoses illustrates the dental department's shift to prioritize DRGA for SHCN patients who have limited alternative treatment options.

## CONCLUSIONS

Providers and hospital systems should recognize the benefit of adopting and expanding caries management techniques, including minimally invasive dentistry, to reduce reliance on DRGA especially for healthy patients.

DRGA should be prioritized in cases of greatest need and for individuals with SHCN who cannot be definitively and safely managed with other treatment modalities.

## REFERENCES

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