

# Pediatric Emergency Department Utilization for Non-Traumatic Dental Conditions in North Central Florida

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#### BACKGROUND

- Non-traumatic dental conditions (NTDCs) refer to diseases affecting the teeth and supporting structures that do not have a traumatic origin.
- Use of the emergency department (ED) for management of nontraumatic dental conditions is a growing problem in the U.S. especially among vulnerable population subgroups such as individuals without health insurance, Medicaid enrollees, and minorities.
- In 2020, Florida had the highest rate of ED visits for children aged 14 and under, at 26.7 per 10,000 people.

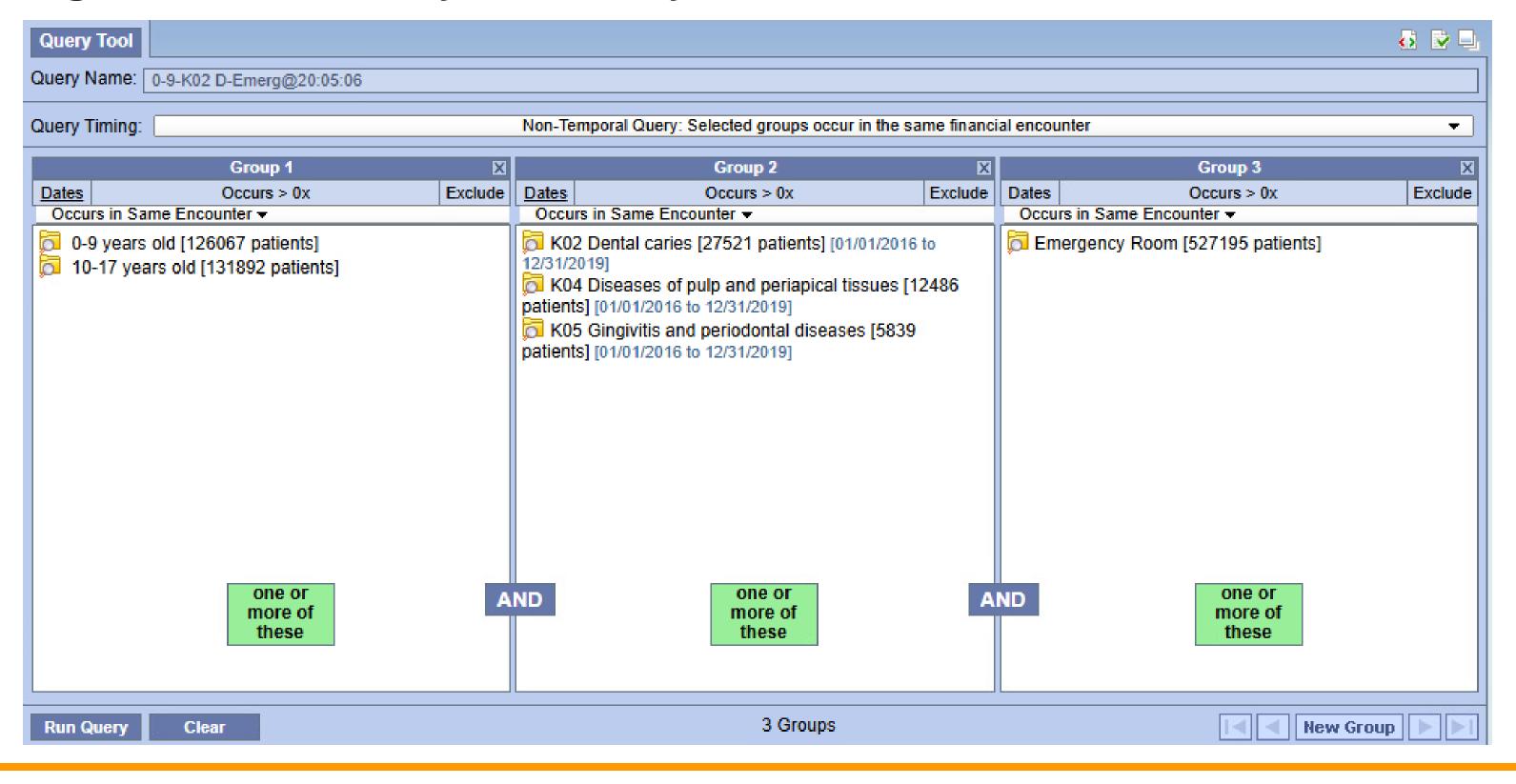
### OBJECTIVE

To evaluate the trends in pediatric ED visits for NTDCs at a North Central Florida public university hospital system, comparing periods before and after the COVID-19 pandemic.

#### METHODS

- Deidentified aggregate data from the University Health Center Integrated Data Repository (I2B2) was utilized to generate counts of pediatric patients diagnosed with NTDCs at ED visits based on ICD-10 code sets.
- Temporal constraints were employed for pre-COVID (2016-2019) and post-COVID (2020-2023) timeframes, and covariates such as patient demographics and health insurance type were examined.

Figure 1: i2b2 Query and Analysis Tool



### RESULTS

Table 1: Demographic Characteristics of Pediatric Patients Diagnosed with NTDCs at UF Health ED

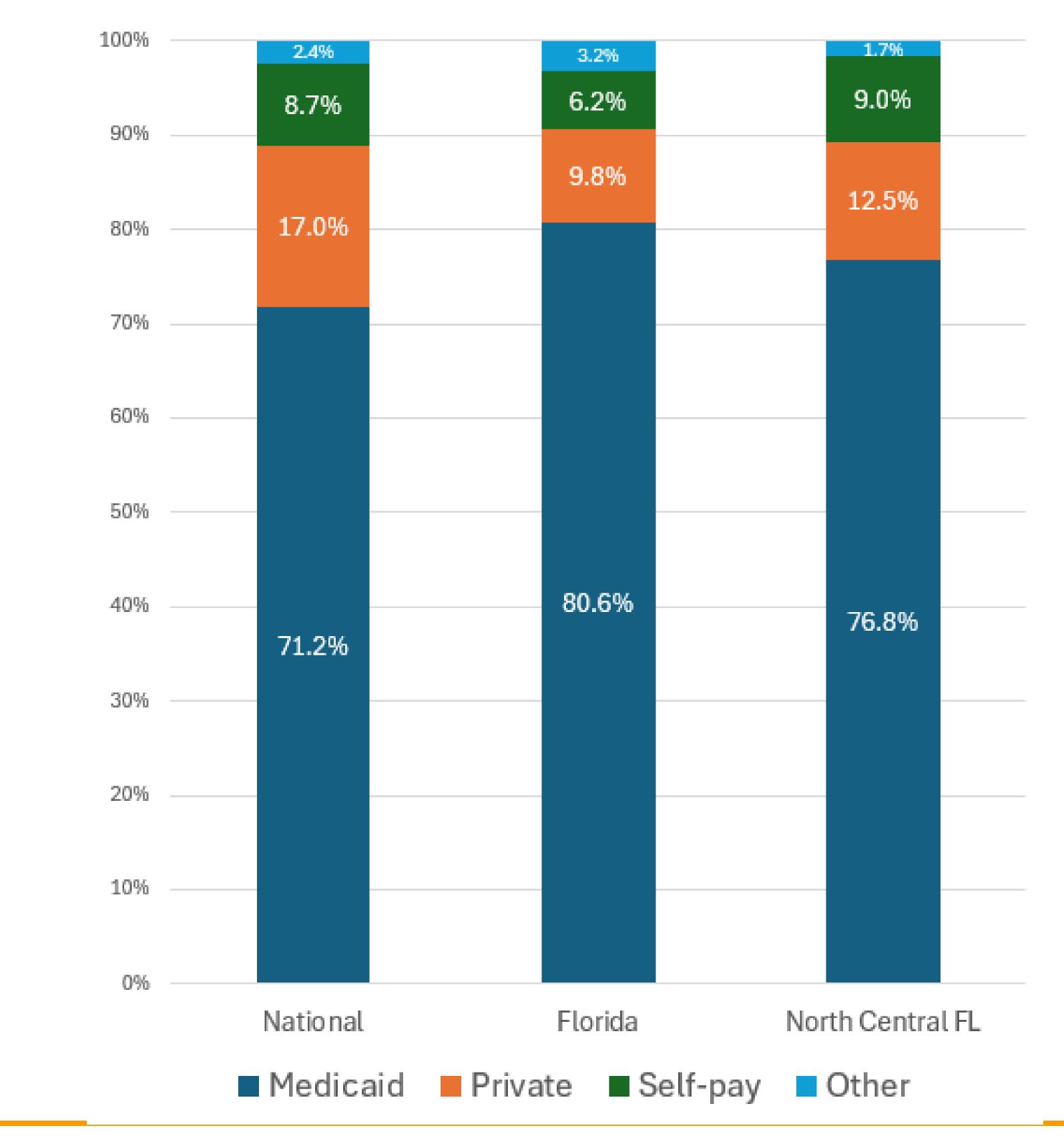
	Pre-COVID	Post-COVID
	N (%)	N (%)
Age		
0-9 years	110 (10.3%)	549 (48.2%)
10-17 years	956 (89.7%)	591 (51.8%
Sex		
Male	617 (57.9%)	628 (55.1%)
Female	449 (42.1%)	512 (44.9%)
Race		
Asian	4 (0.4%)	22 (1.9%)
Black/African American	417 (39.1%)	426 (37.4%)
White	484 (45.4%)	532 (46.7%)
Multiracial	42 (3.9%)	37 (3.2%)
Other	119 (11.2%)	123 (10.8%)
Insurance		
Medicaid	859 (80.6%)	876 (76.8%)
Private	114 (10.7%)	142 (12.5%)
Self-pay	72 (6.8%)	103 (9.0%)
Other	21 (1.9%)	19 (1.7%)

## RESULTS: Summary

- There was no significant difference in NTDC prevalence at ED visits for pediatric patients 0 17 years between pre- and post-COVID timeframes.
- There was a substantial rise in ED visits for younger children (0-9 years) post-COVID, while visits for older children (10-17 years) decreased.
- Medicaid-insured and Black/African American pediatric patients visited the ED for NTDCs more than those with private insurance, self-pay. Or other races.

### RESULTS

Figure 2: Insurance Coverage Percentages for Pediatric ED Visits for NTDCs: National, State, Local (Post-COVID)



### CONCLUSIONS

- The findings highlight the need for targeted strategies to reduce disproportionate NTDC-related ED visits among children aged 0-9, Black/African American children, and Medicaid-enrolled pediatric patients in North Central Florida.
- Emphasizing preventive dental care and improving access to routine dental services for younger children, particularly those aged 0-9 years enrolled in Medicaid, could help address the post-COVID surge in ED visits.