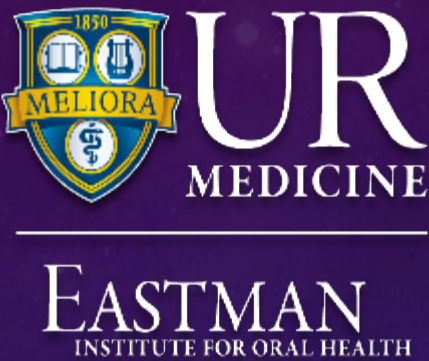


Evaluation of Pre and Post COVID Emergency Demands and Profile for Pediatric Patients

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Introduction

Dental emergencies at the Eastman Institute for Oral Health Division of Pediatric Dentistry have increased after the COVID-19 outbreak. Many families have had no access to routine care during the pandemic lockdown, resulting in a backlog of patients and delay of oral health care. The aim of this study is to explore the profile of patients and types of emergencies during and after the COVID-19 lockdown and analyze any trends or differences. The primary outcomes will analyze if there is an increase in extractions/pulpectomies versus restorative procedures after the lockdown, if there is a difference in sex, or race breakdown.

At the present time, there is limited data describing the use of pediatric dental emergency services during the COVID-19 pandemic. Therefore, this retrospective study will be conducted to assess: If there is an increase in extractions and pulpectomies versus restorative measures or no treatment after the COVID-19 lockdown. If there is an increase in patient first dental visits to Eastman after the COVID-19 lockdown The county, age, gender and race of the patients and if these measures altered before and after the lockdown.

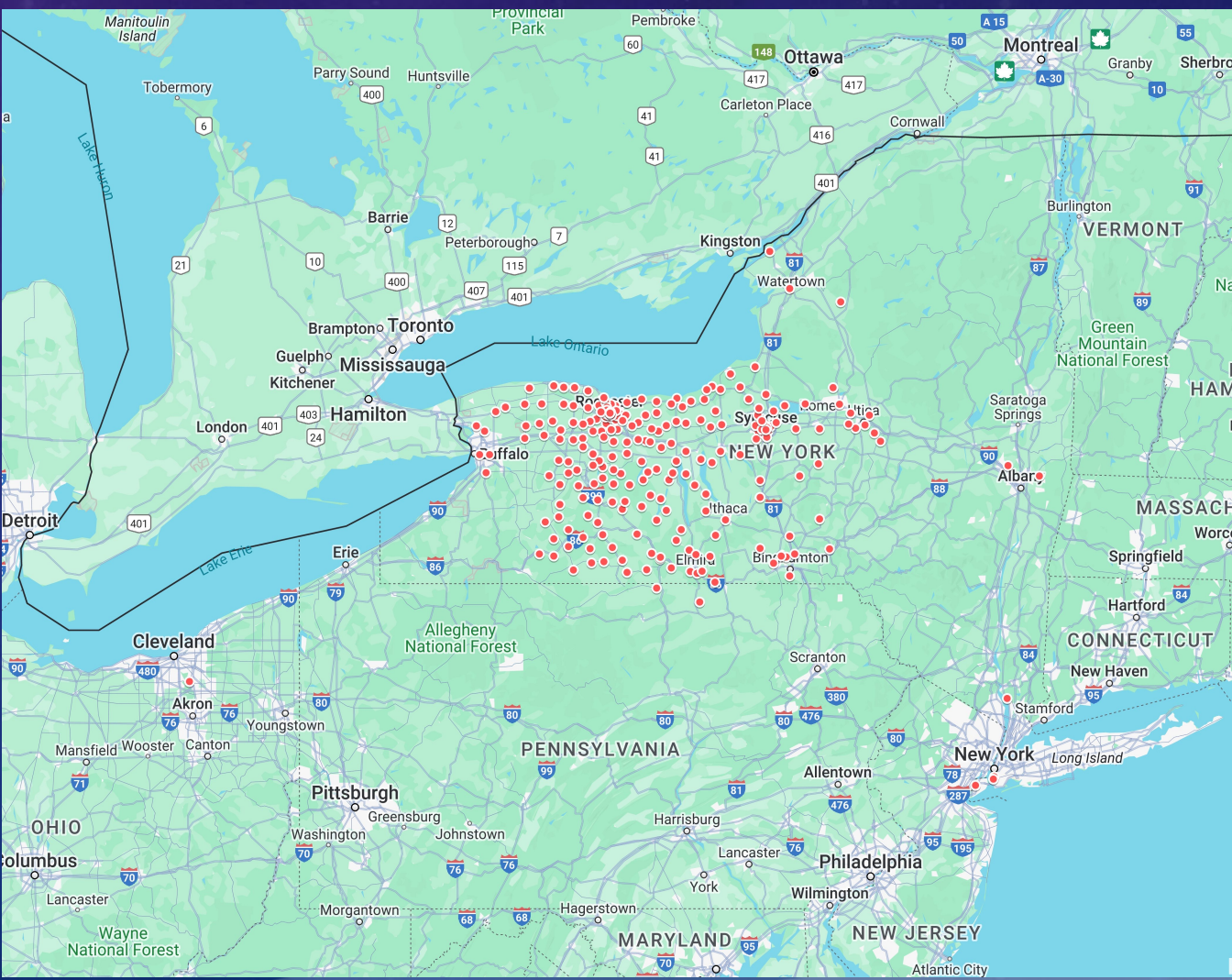
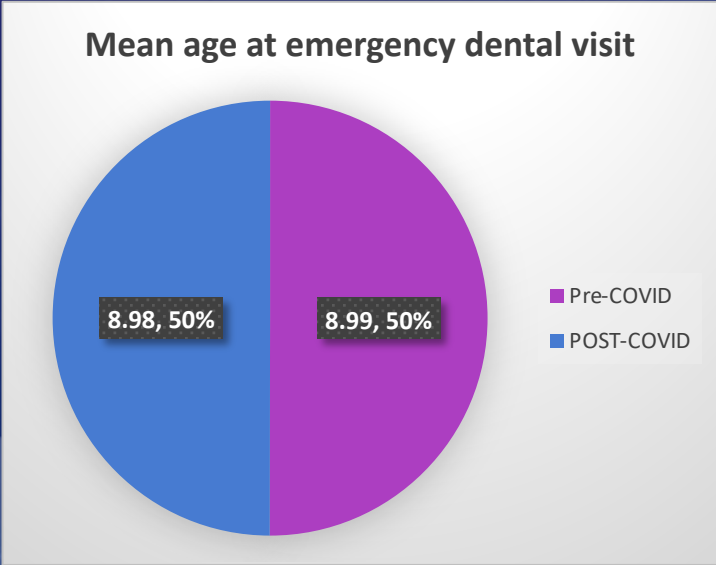
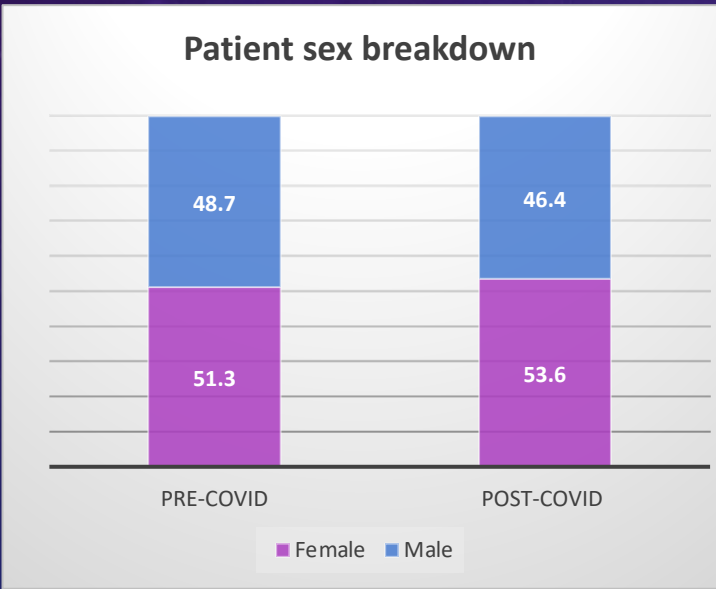
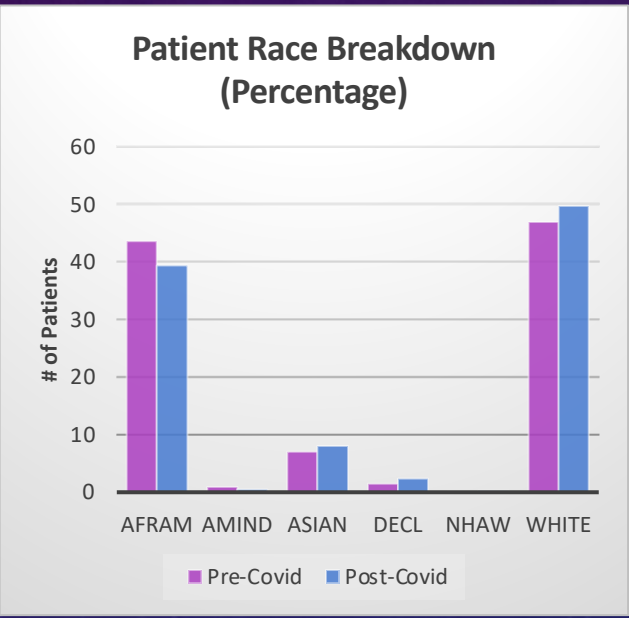
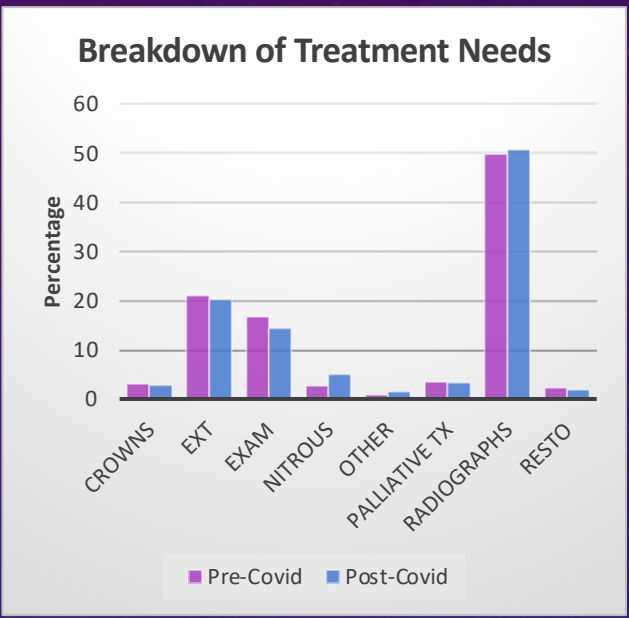
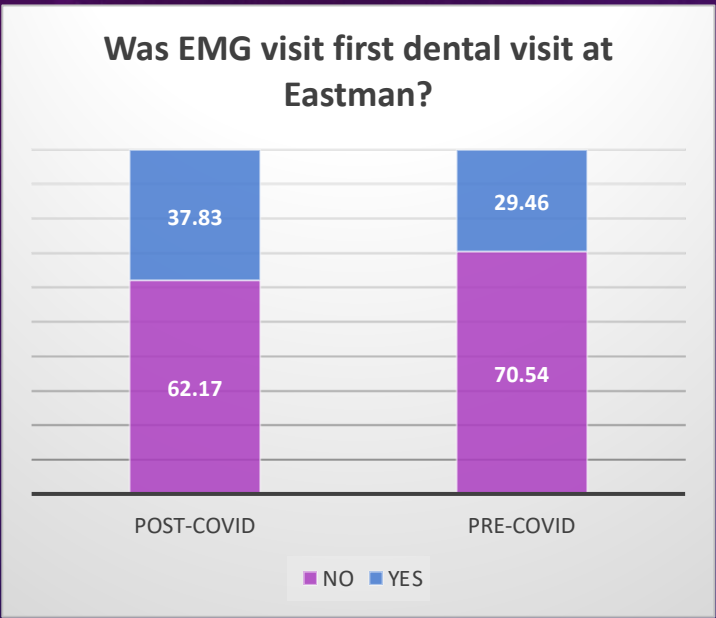
Methods

The retrospective study will utilize data from the Eastman Institute of Oral Health Division of Pediatric Dentistry. This chart review will utilize a report generated by the dental software, axiUm, procedure codes completed during emergency visits, patient demographics including their county, age, gender and race as well as if it is their first dental visit at Eastman.

- Data will be collected from all patients between ages 0-18 who attended Eastman emergency from March 13, 2019 to March 13, 2020 and from March 13, 2021 to March 13, 2022.
- The following data will be obtained for evaluation: Procedure codes completed, county patients are coming from, patient age, gender and race. In addition, it will be noted if this is the patient's first visit at Eastman.
- Identifiable data will be collected temporarily (patient record number, dates of service) then coded, and then deleted to minimize risk.
- Data will be collected and stored in a Microsoft Excel document and saved in the online platform box.com, which is secured by URM firewall.
- There is no interaction with any child in this study.

Statistical Analysis: Patient outcomes will be categorized by procedure codes billed out during the emergency visit. Study outcomes of procedure codes will be summarized by race, age, gender, the subgroups will be compared using Chi-Squared tests. It will be noted if it is the patient's first visit at Eastman and the county the patients are coming from.

Results



Geographical Breakdown of Patient Population)

(Google Maps)

Conclusions

- Trends in dental emergencies at Eastman Dental Center pediatric department are similar pre-COVID and post-COVID in terms of treatment rendered, sex of patient, and age at emergency visit
- There was a statistically significant difference in patient first visit to Eastman frequency pre-COVID versus post-COVID where patients first visit to Eastman was more frequently noted post-COVID vs pre-COVID ($P=.0001$)
- There is no difference in mean patient age at emergency visits to Eastman pediatric department pre and post-COVID ($P=0.089$, $p>0.05$)
- There is no difference in patient sex breakdown pre and post-COVID ($P=0.09$, $p>0.05$)
- The amount of emergency visits were higher in frequency post-COVID, however the proportion of procedures remained similar pre and post-COVID
- The majority of patients coming into Eastman for emergency are from New York State, with some patients coming from Chicago, Texas, Florida, Maryland, Charlotte, Atlanta, Georgia, Indiana, Ohio and Virginia
- The mean distance of all counties the patients are coming from is 113 miles from Eastman

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