



A Descriptive Analysis of the Emergency Calls of the UMN Graduate Pediatric Dental Clinic

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Purpose

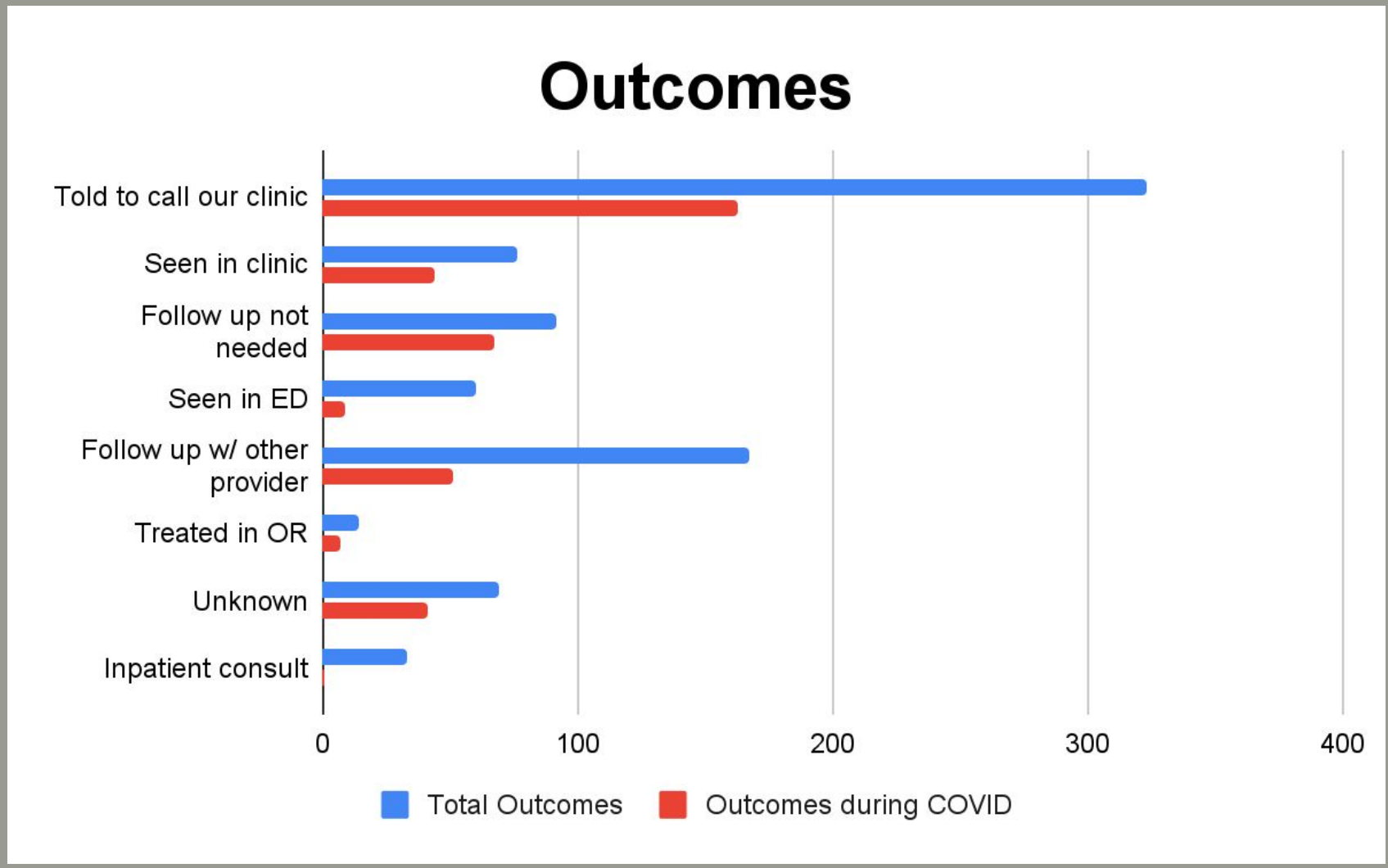
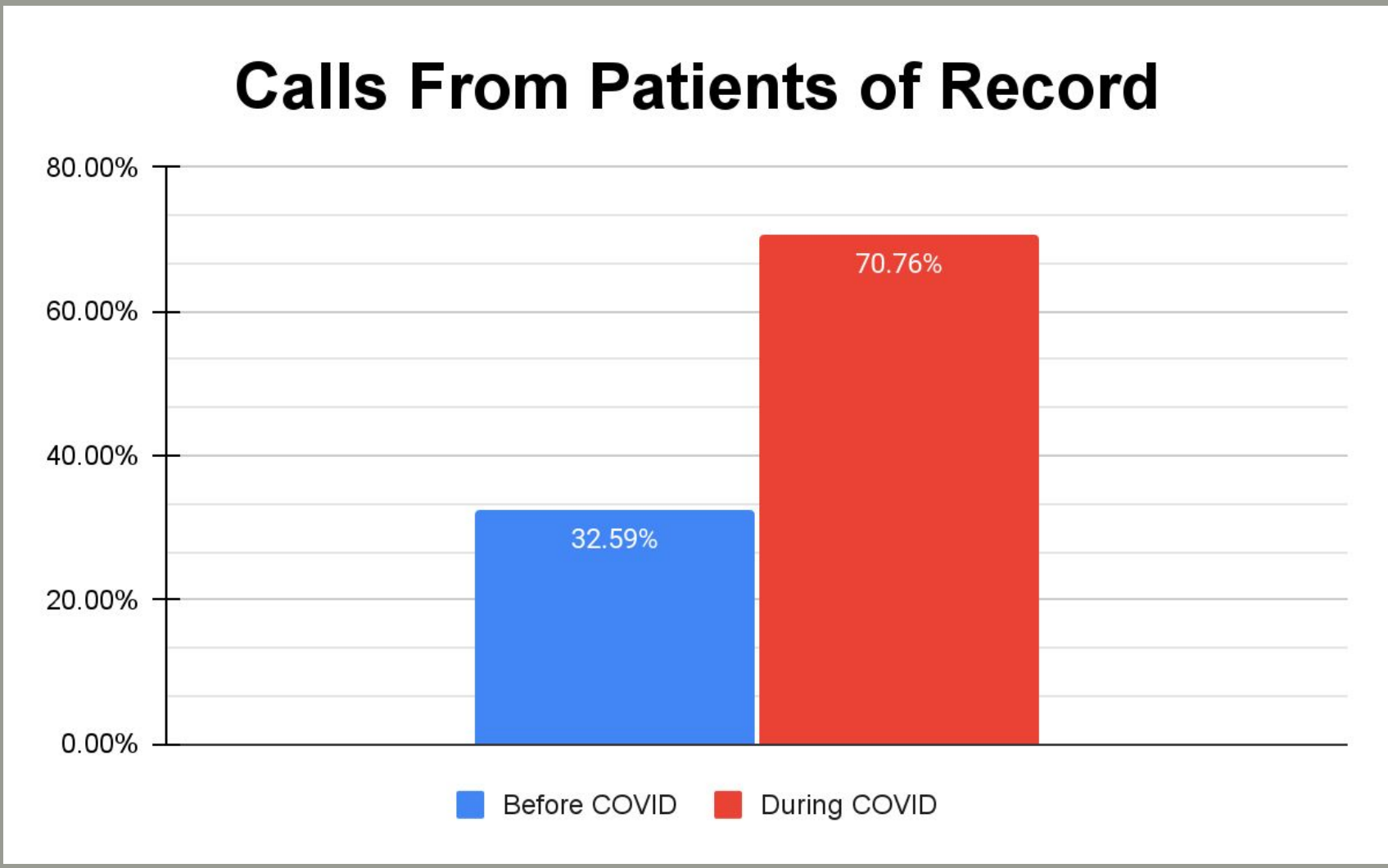
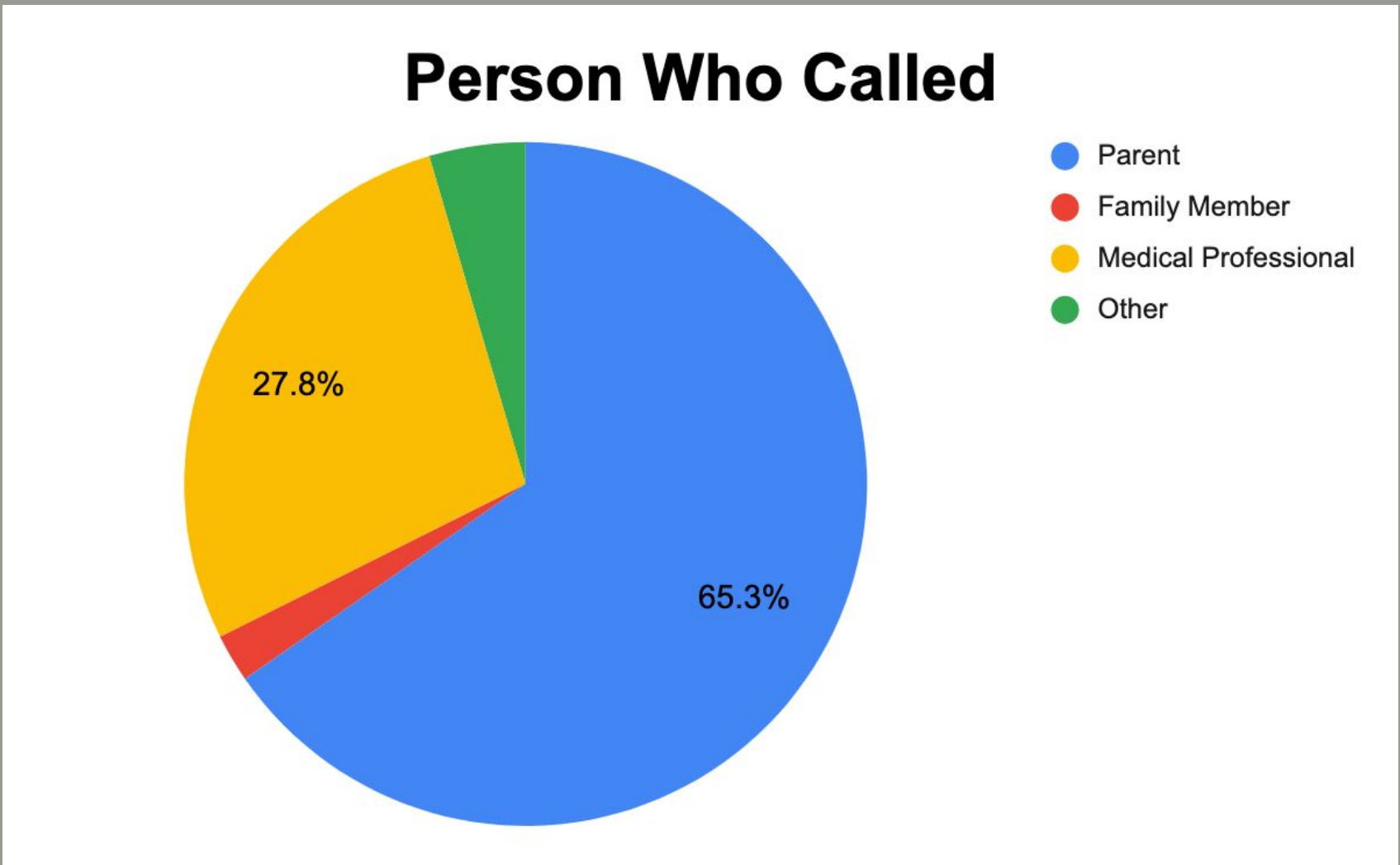
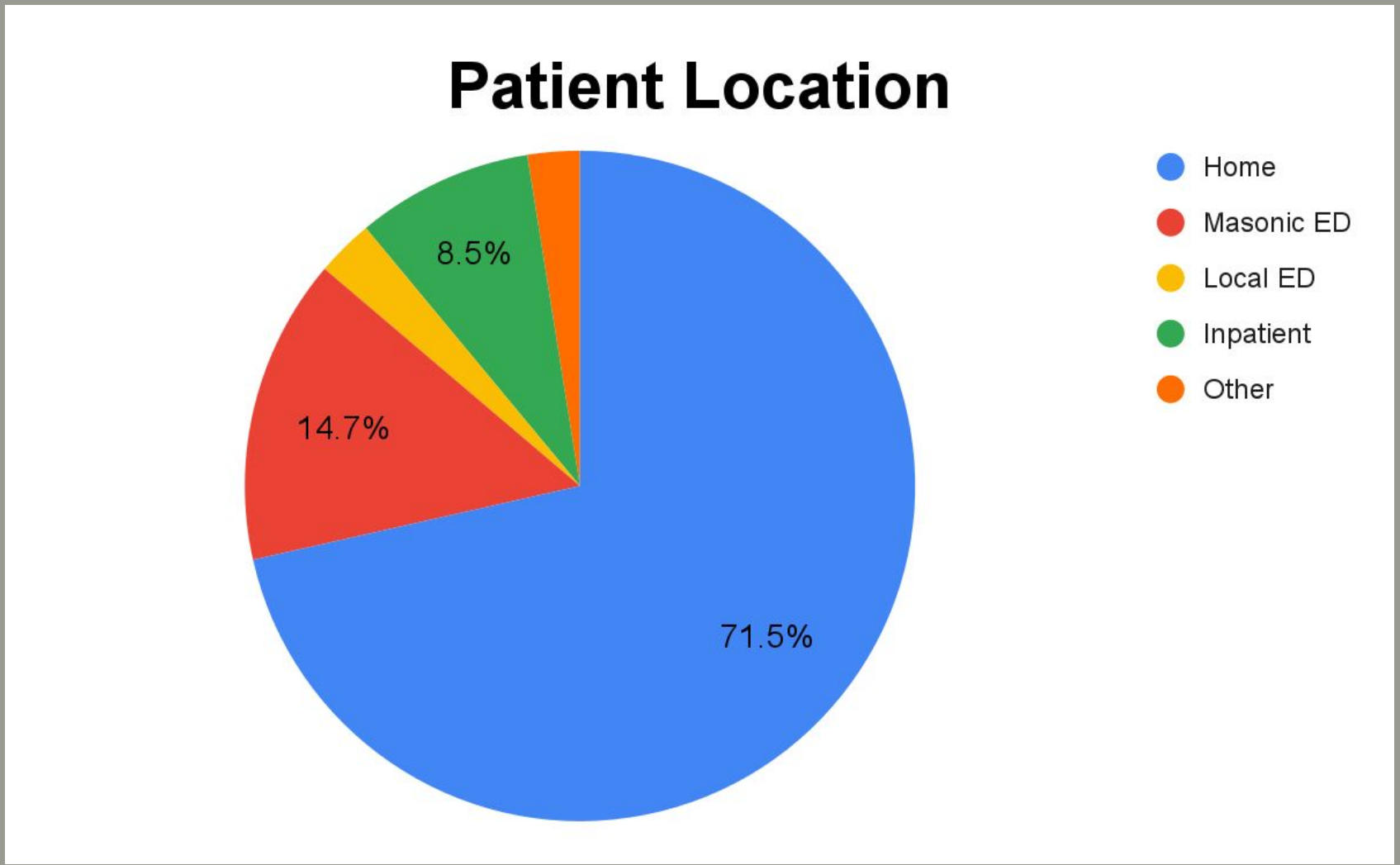
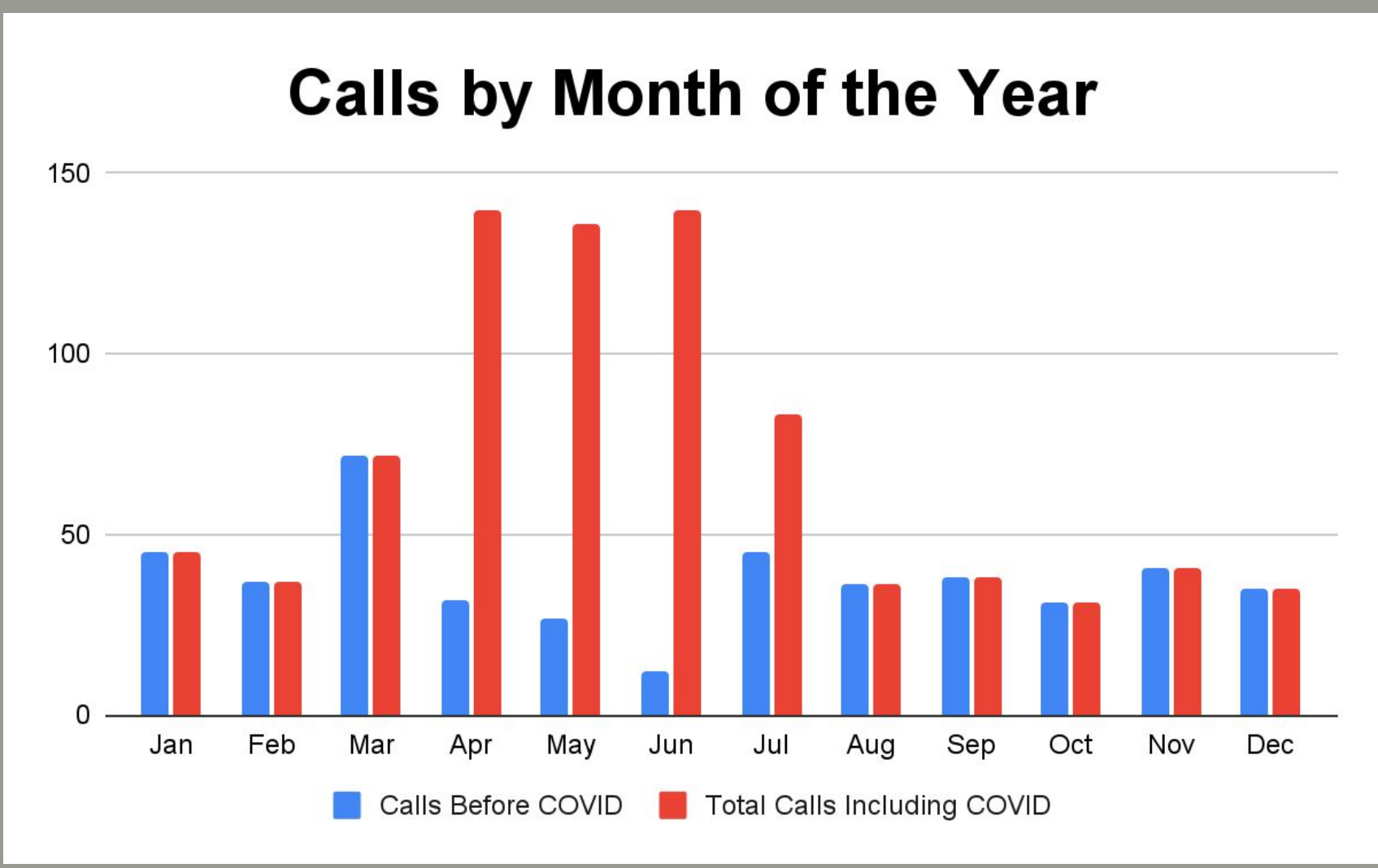
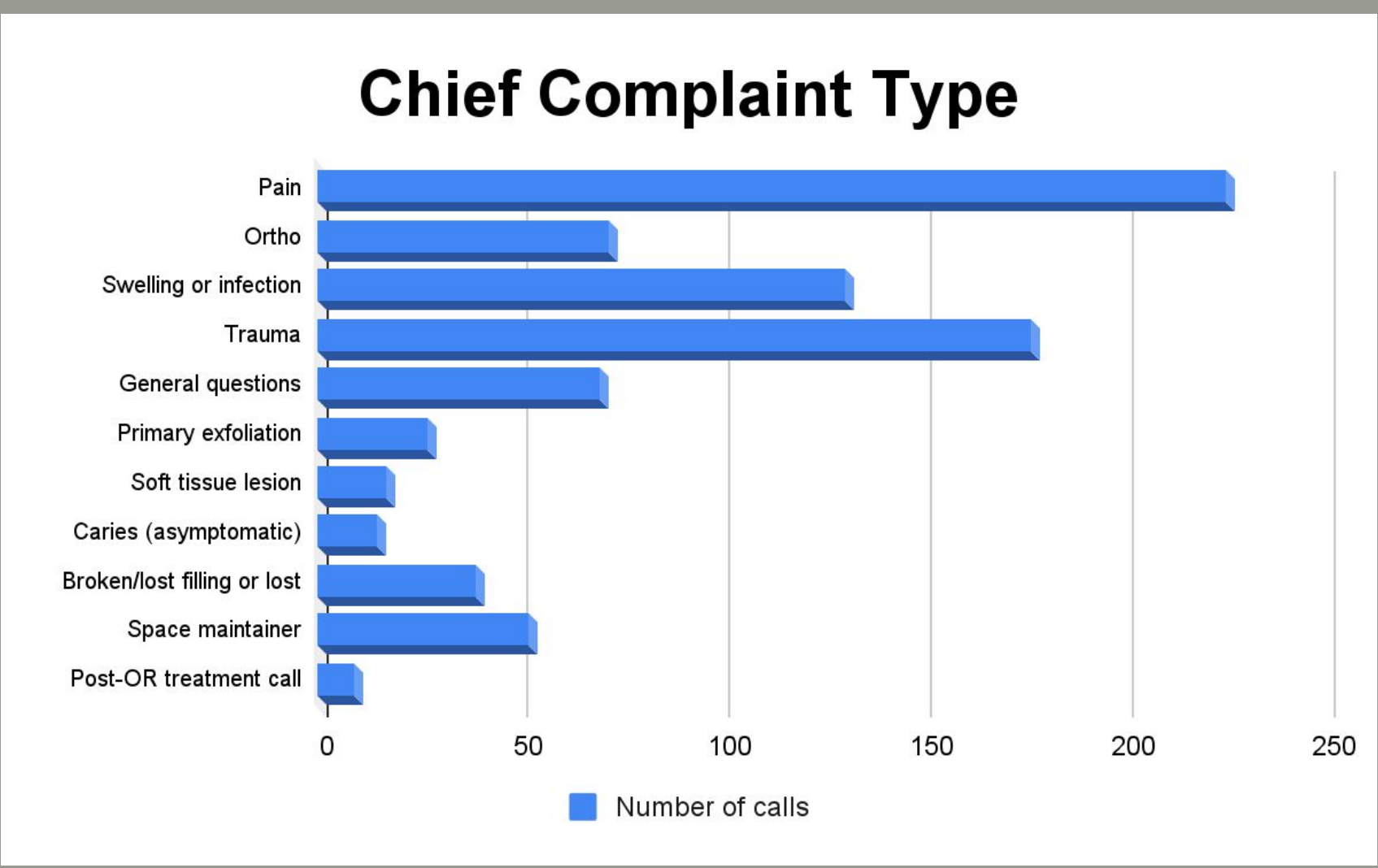
Parents who lack a dental home and routine dental care for their children often seek dental care at Emergency Departments. The purpose of this study was to perform a retrospective analysis of the emergency calls to the University of Minnesota Pediatric Dental Clinic in order to characterize the nature of the dental emergency, the treatment provided and the frequency of patients who seek dental care at the Emergency Department and to compare the results between COVID and non COVID times.

Methods

All emergency calls from July 2019 to June 2021 made to the University of Minnesota Pediatric Dental Clinic were logged in a secure web-based call log totalling 834 patient calls.

Data were abstracted from this call log and included the date and time of contact, patient's age, sex, location, contact person, chief complaint, whether or not there was a transfer from a local Emergency Department, patient's medical conditions as measured by ASA status, if the caregiver gave analgesics, hospital consults, involvement of other services, if the patient presented to Masonic Emergency Department, if the patient was admitted to the hospital, if the patient was an existing patient of record, if the patient has not seen a dentist before, if analgesics were recommended, if antibiotics were prescribed or recommended, if intravenous antibiotics were given, if the patient was referred to the emergency room, if photos of the chief complaint were received from the family, the outcome and type of treatment rendered.

Results



Acknowledgements: Special thanks to dental students Kalee Abu-Ghazaleh and Neha Sethi for help with data collection and analysis.

Results

Average age of patients (years)	7.5
Female patients	431 (51.7)*
Male patients	399 (47.8)*
Mothers called	80 (9.6)
Father called	457 (54.8)
Phone consult only	715 (85.7)
Hospital consult	71 (8.5)
Transferred from another ED	27 (3.2)
Patients sent to the ED	23 (2.7)
Patients admitted to the hospital	15 (1.8)
Involvement of other services	24 (2.91)
Complex medical conditions	119 (14.3)
First dental visit	42 (5.0)
If CC includes pain, OTC analgesics given	142 (17.0)
OTC analgesics recommended	258 (30.9)
Antibiotics prescribed	120 (14.4)
IV antibiotics given	22 (2.6)
Patients received treatment of extraction, splint, suture or endodontics	55 (6.6)
Received photos of CC, before COVID	21 (9.3)
Received photos of CC, after COVID	192 (31.5)

Conclusion

This study showed the top reasons for emergency calls were pain, trauma and swelling/infection respectively totalling 64%. The majority of patients were at home (71.5%) and majority of the callers were the parents (65.3%). Before COVID, March had the highest volume of calls. Total call volumes were the highest in April - June as a result of the call volumes during COVID. Before COVID, 32.6% of the calls were from patients of records compared to 70.8% during COVID. Before COVID, photos of the chief complaint were received 9.3% of the time compared to 31.5% during COVID. The top outcome before and during COVID was that the caller was told to call the clinic. Understanding the characteristics of emergency calls allows for planning, delegation of resources, and creating policies to improve patient care.