Retrospective Review: The Potential Association of Dental Emergency Appointment with Medical Dental Integration

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INTRODUCTION

- Children from low-income families who are insured by Medicaid or have no dental insurance experience twice the rate of dental caries and are less likely to receive preventive or restorative dental care for their cavities².
- Approximately 21% of all US children, or roughly 7.6
 million children ages 2-11 have untreated dental caries.
 Children from low-income families have difficulty
 accessing dental care³.
- Patients who are insured by Medicaid or those without any form of dental insurance use disproportionately more emergency services than those with private insurance³.
- Approximately 47% of children ages 2 to 5 years were advised to see the dentist, and those who received recommendation were almost 3 times more likely to have a dental visit than those children who did not receive such recommendation¹.

PURPOSE

Identify and investigate if there's a difference in percentage of dental-related emergency in pediatric patients who are patients of record at both Sun Life's Medical and Dental clinics compared to those who are only patients of record at Sun Life's Dental clinic.

METHOD

- Retrospective charts review (2020-2021).
- Inclusion criteria: Patient ages 0-18 years old, who received emergency dental treatment with code D-TA visits at Sun Life Pediatric Dentistry were reviewed.
- **Exclusion criteria**: Patients seen out of the selected study period and older than 18 years of age. Also, patients who have never scheduled a dental appointment are excluded from the research.
- Data Collection: The dental management soft ware, eCW, was used to query the patient records at Sun Life Pediatric Dentistry in Casa Grande, Az in US. A total of 9,310 patient appointments met the inclusion criteria.
- Data Analysis: Chi square test performed to find potential association of dental emergency between patient of dental record and patient of medical/dental record.

TABLE 1

Types of visits between dental patients of record and medical/dental patients of record.

| | D-TA | Non D-TA |
|----------------------------|-----------|--------------|
| Total appointments | 365(3.9%) | 8,945(96.1%) |
| Dental patients of Record | 97(3.8%) | 2,450(96.2%) |
| Medical/Dental patients of | 268(4%) | 6,495(96%) |
| Record | | |

TABLE 2

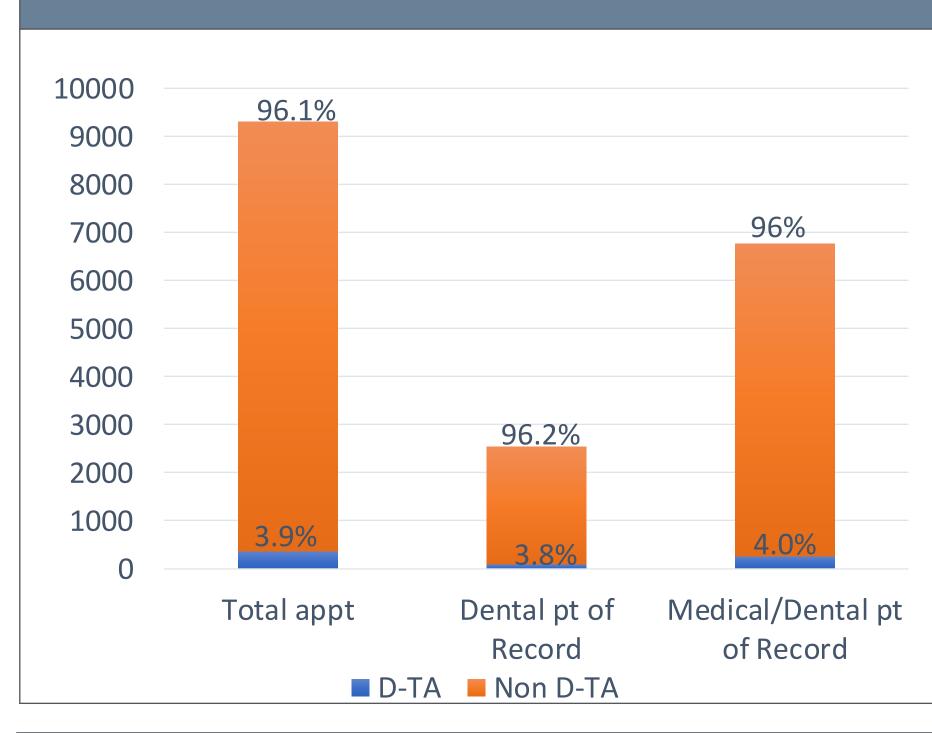
Table 2: Visit status between dental patient of record and medical/dental patient of record.

| | Successful | Unsuccessful |
|---------------------------|--------------|--------------|
| | Appointments | Appointments |
| Total appointments | 5,732(61.6%) | 3,578(38.4%) |
| Dental patient of Record | 1,159(45.5%) | 1,388(54.5%) |
| Medical/Dental patient of | 4,573(67.6%) | 2,190(32.4%) |
| Record | | |

RESULTS

- Total of 356(3.9%) D-TA appointments out of 9,310 dental appointments.
- 3.8% D-TA appointments for Dental patient of record versus 4.0% D-TA appointments for Medical/Dental patient of record. Chi square test of p<0.778, showed that there is no statistically significant difference.
- Medical/dental patient of record with successful appointments at a rate of 67.6%, and dental patient of record with successful appointment at a rate of 45.5%. Chi square test of p<0.001, there is an association.
- There is a higher likelihood that medical/dental patients of record will have a successful appointment at Sun Life Pediatric Dentistry.

Visit Types in Medical/Dental patient of Record vs. Dental patient of Record



DISCUSSION

- Patients are more likely to attend dental appointments if they have an integrated medical and dental record.
- The number of D-TA appointments scheduled in patients of medical/dental record was slightly higher than patient of dental record. The reason may be due to accessibility to dental care under the same Health system.
- This study is limited with a small sample size. Future studies is needed to better understand the potential association of dental emergency appointment with medical dental integration or other potential associations.

CONCLUSIONS

- There is no statistically significant difference in dental-related visits(D-TA) between dental only patients of record versus medical/dental patients of record.
- There is an association of successful appointment between medical/dental patients of record and dental patients of record. There is a higher likelihood that medical/dental patients of record will have a successful appointment at Sun Life Pediatric Dentistry comparing to patients of dental record.

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