

# Discrepancies Between Parent-Derived Health Histories and Medical Health Records of Pediatric Dental Patients at Tufts

Principal Investigator (PI): Cheen Loo, BDS, PhD, MPH, DMD , Co-Investigators : Shadi Alghamdi, BDS , Jerry Swee, DMD, MS , Sarah Pagni, PhD, MPH , Jessica Zammitti Jordan.

## Abstract

Obtaining thorough documentation of a patient's medical history is important for dental care professionals, as oral health is connected intricately to systemic health. The purpose of this study is to assess the accuracy of parent-reported health history for pediatric patients in a dental setting.

## Purpose

To compare between what parents reported about their child's medical conditions on their initial visit and what was reported on child's medical record from their Primary health care provider.

## Materials & Methods

Retrospective study was conducted through Axium. Medical history including any medical conditions, allergies or medications from records obtained in the patients' initial visit to Tufts. Patients who had dental treatment under general anesthesia from 01/01/20 to 30/12/22 were included. Medical history obtained from their primary care physician including any medical conditions, allergies or medications was collected.

Table 1. Patient gender.

Total number of patients	589
Male	389
Female	200

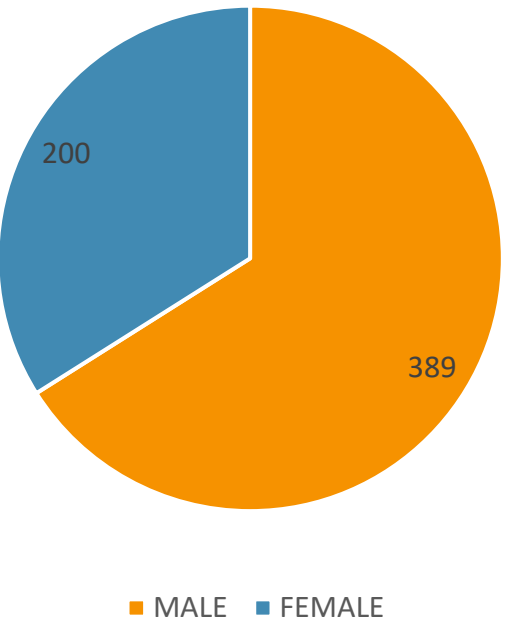


Figure 1. Gender percentage.

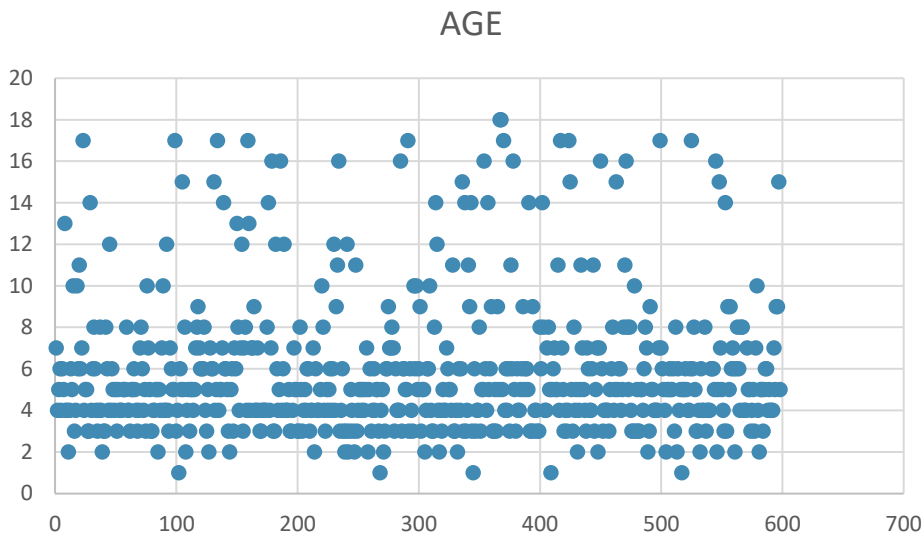


Figure 2. showing age distribution. Minimum age is = 1 year old, and Maximum age is 17 years old , with a mean age of = 5 years old

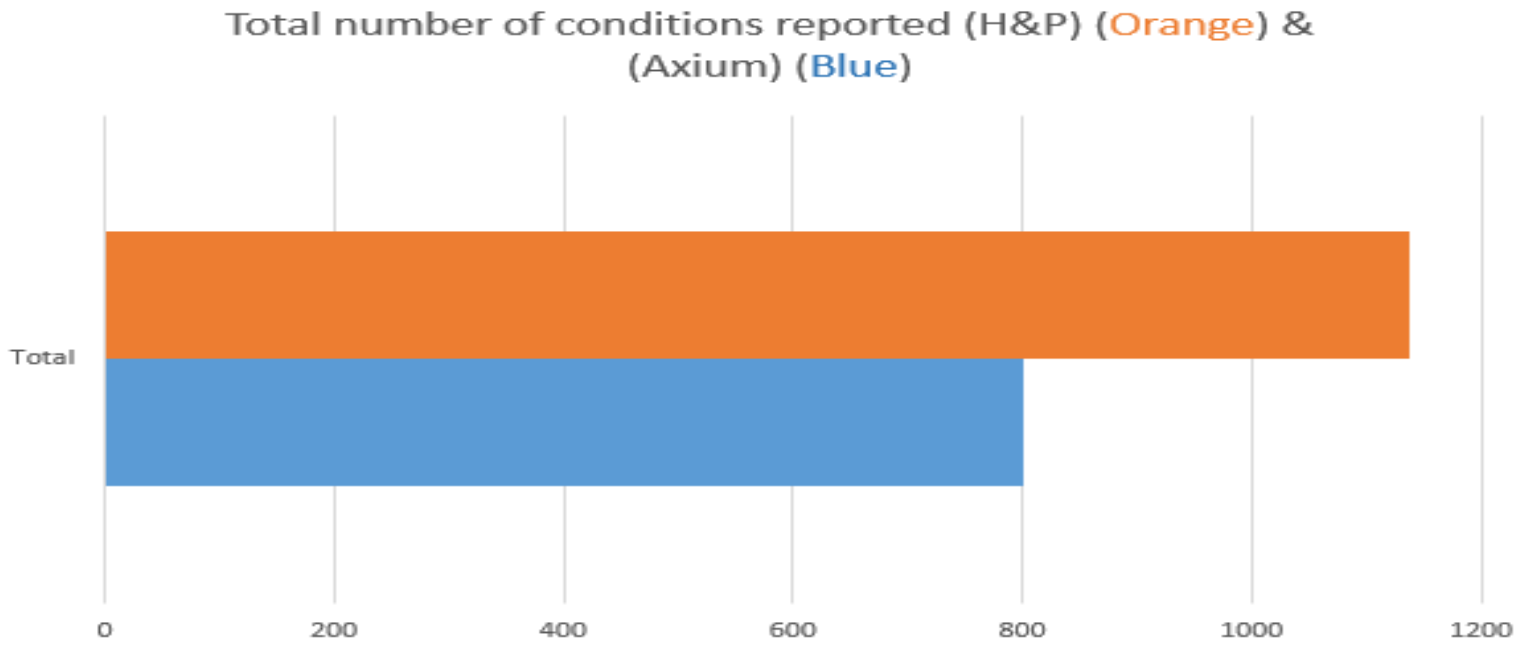


Figure 3. Conditions reported by H&P and conditions reported by parents.

## Data Analysis

Data Analysis : A convenience sample of up to 589 records was included in the study. Descriptive statistics (means and standard deviations for continuous outcomes, counts and percentages for categorical variables) were calculated. Sensitivity and specificity analyses were performed with the PCP responses as the gold standard. Stata 17 was used for the statistical analysis.

## Results

Percent Agreement = 86.60%

The percentage of when the Axium (Parents reported) record and the H&P agreed that there either was a condition (both are yes/1) or there was not a condition (both are no/0)

Sensitivity = 4.05%

Sensitivity is the probability of axium reporting a condition when the H&P (the gold standard) says that there is a condition. In this case, among the 74 positive cardiology conditions identified by the gold standard, H&P, 3 of them were also identified in axium – so the sensitivity is 3/74 or 4.05%

Specificity = 92.28%

Specificity is the probability of axium reporting there is no condition when the H&P (the gold standard) also says that there is not a condition. For cardiology, among all of those deemed as “healthy”/not having a cardiology condition by the gold standard, H&P, 523 patients, 514 were reported as also not having a condition based on the axium record. The sensitivity is 514/523 = 98.28%

## Discussion & Conclusion

The results of this study determined that dental health history forms and updates completed by parents or guardians are not consistent with the H&P completed by health care providers. A surprising 13.4 % percent of all patient charts had discrepancies between their H&P and parent reported.

Our study showed that parents have varying ability to accurately identify children's health history in a dental setting. To ensure up-to-date and accurate documentation of patients' health histories. dentists should obtain medical consultations before providing dental treatment for patients within complete medical histories or special health care needs. Ultimately, integration of dental and medical information systems should be considered to provide optimum care

## References

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