Differences in Restorative Treatment by Pediatric and General Dentists

Adam Hurst^{1,2}; Jessica Webb^{2,3}

INTRODUCTION

- Hispanic children and children living in low socioeconomic households are disproportionately affected by dental caries¹
- Untreated caries can have myriad negative effects on growth and development²
- Untreated caries can put an enormous strain on the healthcare system as a whole²
- Pediatric dentists (PDs) and general dentists (GDs) often differ in their approach to management of caries in children
- PDs often place stainless steel crowns (SSCs) while GDs place intracoronal restorations at a higher rate³
- Yakima Valley Farm Workers Clinic (YVFWC) is a group of community clinics that employs PDs and GDs
- YVFWC serves a high percentage of Hispanic children and children in low socioeconomic households

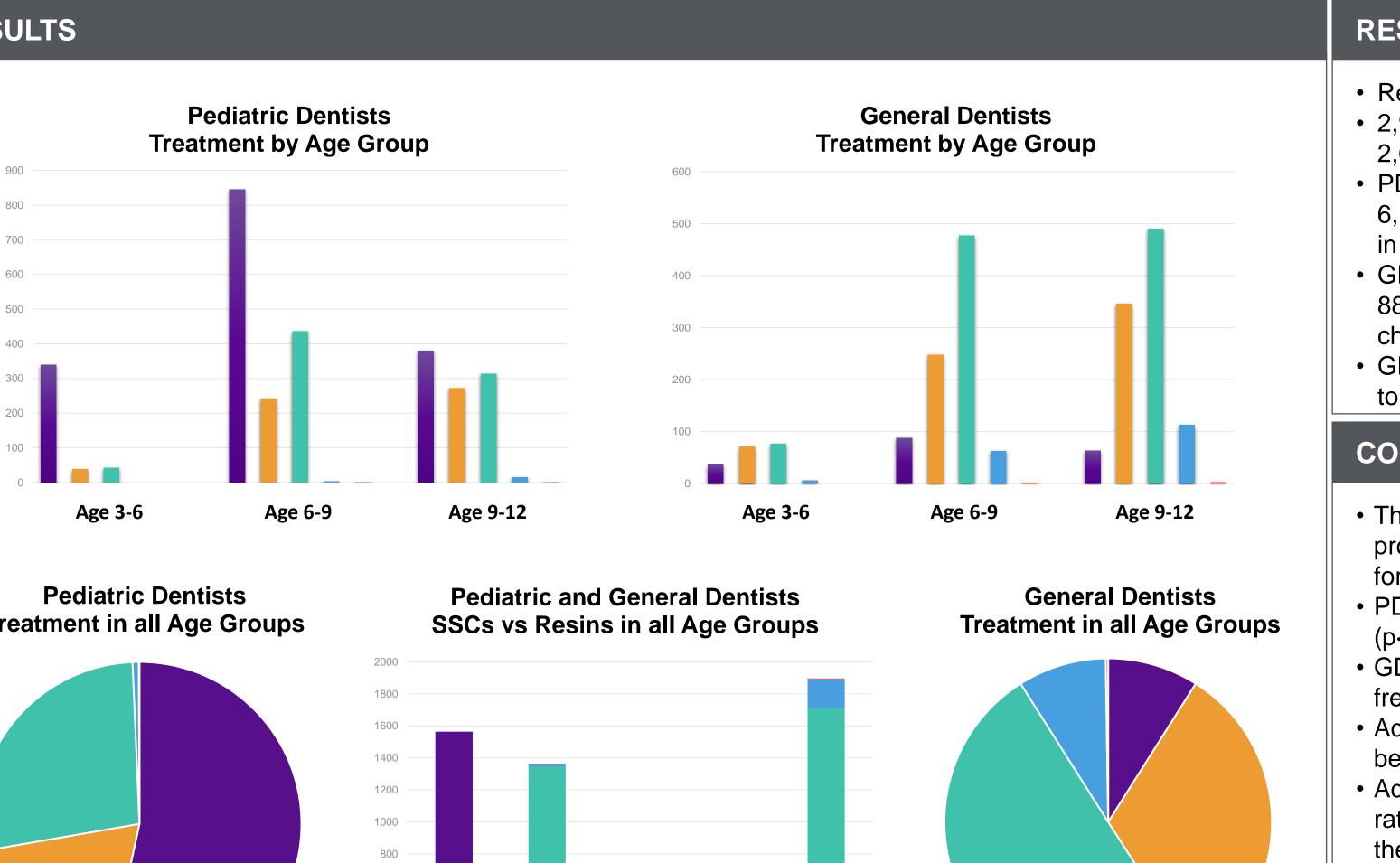
PURPOSE

• To compare the rates of usage of SSCs vs intracoronal restorations by PDs and GDs practicing at YVFWC network dental clinics in Yakima, WA

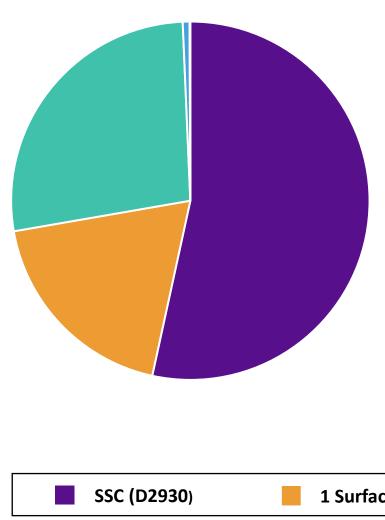
METHOD

- Dental records of children ages 3-12 were included
- Age range was further stratified by patient age groups (3-6, 6-9, 9-12)
- A report was generated collecting billing codes for 1, 2, 3 or 4 surface resin restorations and SSCs
- Treatment completion dates ranged from January 1, 2020 through December 31, 2021
- Data was separated according to type of clinic (pediatric dentistry or general dentistry) where treatment was provided

RESULTS



Treatment in all Age Groups



¹Yakima Valley Farm Workers Clinic – ViewCrest Pediatric Dentistry, Yakima, WA, ²Advanced Education in Pediatric Dentistry, NYU Langone Health, Brooklyn, NY, ³Children's Village, Yakima, WA

REFERENCES



GD

4 Surface Resin (D2394)

1 Surface Resin (D2391)

PD

Legend

2 Surface Resin (D2392)



NYU Langone Dental Medicine Postdoctoral Residency Programs

RESULTS

- Report included 5,011 total dental treatment codes • 2,938 (59%) of those codes were billed by PDs and 2,073 (41%) by GDs
- PDs completed 339 (80.9%) SSCs in children aged 3-6, 845 (55.3%) in children aged 6-9, and 380 (38.7%) in children aged 9-12
- GDs completed 36 (18.9%) SSCs in children aged 3-6, 88 (10%) in children aged 6-9, and 63 (6.2%) in children aged 9-12
- GDs placed 1,896 (91%) resin restorations, compared to 1,374 (46.7%) placed by PDs (p<0.0001)

CONCLUSIONS

- There is a significant association between the type of provider (PD v. GD) and the type of treatment rendered for all age groups (p<0.0001)
- PDs place SSCs more frequently for all age groups (p<0.0001)
- GDs place intracoronal resin restorations more frequently for all age groups (p<0.0001)
- Additional research needed to determine reason behind discrepancy in treatment preferences
- Additional research needed to compare replacement rates between intracoronal restorations and SSCs and their effect on the healthcare system

1. Fleming E, Afful J. Prevalence of Total and Untreated Dental Caries Among Youth: United States, 2015-2016. NCHS Data Brief. 2018 Apr;(307):1-8. PMID: 29717975. 2. Seirawan H, Faust S, Mulligan R. The impact of oral health on the academic performance of disadvantaged children. Am J Public Health. 2012 Sep;102(9):1729-34. doi: 10.2105/AJPH.2011.300478. Epub 2012 Jul 19. PMID: 22813093; PMCID: PMC3482021

3. Shelton A, Yepes JF, Vinson LA, Jones JE, Tang Q, Eckert GJ, Downey T, Maupome G. Utilization of Stainless Steel Crowns by Pediatric and General Dentists. Pediatr Dent. 2019 Mar 15;41(2):127-131. PMID: 30992110.