

Evaluating the Impact of Referral Age and Duration of Pediatric Care on Dental Referral Completion Rates in a Federally Qualified Health Center



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INTRODUCTION

- Early Childhood Caries (ECC) is the most common chronic childhood disease.
- AAP & AAPD recommend first dental visit by age 1 or eruption of the first tooth.
- Pediatricians often delay dental referrals due to limited training, competing demands, and poor referral systems.
- Objective:** Evaluate whether age at referral and duration of pediatric care influence referral completion in a Federally Qualified Health Center (FQHC).

METHODS

- Design:** Retrospective chart review.
- Setting:** Sun Life Health (FQHC), Casa Grande, AZ.
- Population:** 356 pediatric referrals from medicine to dentistry (2022–2024).
- Variables:**
 - Age at referral (≤ 1 year vs. > 1 year).
 - Duration of pediatric care (≤ 1 year vs. > 1 year).
 - Referral completion = scheduled + attended dental appointment.
- Analysis:** Descriptive statistics, chi-square, Wilcoxon rank-sum ($\alpha=0.05$).

RESULTS

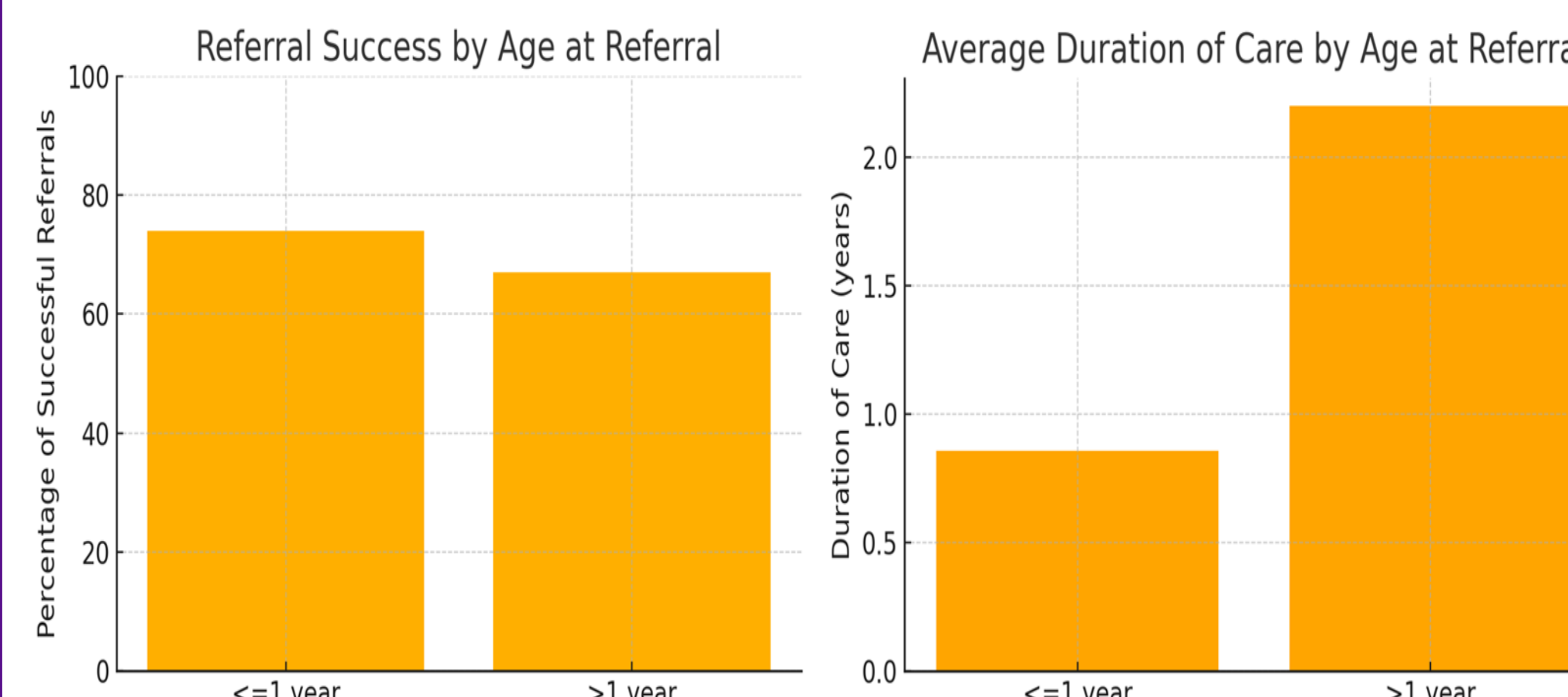
- Sample characteristics:**
 - N=356; mean referral age 4.4 years (SD 3.8).
 - 29% referred ≤ 1 year; 71% referred > 1 year.
 - Overall referral completion = 69%.
- Referral age findings:**
 - ≤ 1 year \rightarrow 74% referral completion.
 - 1 year \rightarrow 67% referral completion.
- Difference not statistically significant ($p=0.20$).
 - (Table 2, Figure 1)
- Duration of care findings:**
 - ≤ 1 year \rightarrow 69% referral completion.
 - 1 year \rightarrow 69% referral completion.
 - No significant difference ($p>0.90$).
 - (Table 3, Figure 2)

Table 2. Patient characteristics by age at referral

Characteristic	≤ 1 year (n=102)	> 1 year (n=254)	p-value
Referral success	75 (74%)	169 (67%)	0.20
Duration of care, y	0.9 (0.4)	2.2 (2.8)	0.065

Table 3. Patient characteristics by duration of care

Characteristic	≤ 1 year (n=165)	> 1 year (n=186)	p-value
Age at referral, y	4.5 (4.0)	4.1 (3.7)	0.60
Referral success	114 (69%)	129 (69%)	> 0.90



LIMITATIONS AND STRENGTHS

- Limitations:**
 - Single-site study at one FQHC.
 - Retrospective design, limited control of confounders.
 - Socioeconomic and parental factors not measured.
- Strengths:**
 - Integrated FQHC setting with both medical and dental services.
 - Relatively large sample size (N=356).
 - Real-world applicability to underserved populations.

CONCLUSIONS

- Earlier referrals (≤ 1 year) **trended toward higher completion** but were not statistically significant.
- Duration of pediatric care **did not affect referral success**.
- Barriers beyond referral timing (parental follow-through, socioeconomic challenges, system-level issues) are likely most influential.
- Clinical significance:** Strengthening interprofessional collaboration in FQHCs may improve referral completion and early dental home establishment.

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