Establishing a Dental Home Through a Pediatric Medicine Referral Program

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Introduction/Background

- Pediatric primary care settings are an ideal place to promote oral health and provide preventive services for families (1).
- Oral health integration in medical clinics contributes to greater dental referrals (2,3), but research is needed on whether dental homes are established as a result of these referrals
- In NYCH+H / Bellevue's Ambulatory Care, a pilot program was implemented, in which children presenting to the Pediatric Medical Clinic (PMC) for a well-care visit received an oral health assessment and fluoride varnish application, as well as a referral to NYCH+H / Bellevue's Pediatric Dental Clinic (PDC), located a few steps away.
- The aim of this study was to gather data and evaluate the effectiveness of this referral program of patients being referred from PMC to PDC, in the establishment of a dental home.

Methods

- This study was approved by NYU (IRB #i21-00434), Columbia (IRB #AAAT8932), and NYC H+H (STUDY#3312).
- Inclusion criteria: Patients age 1-18 years in the pilot program from March 1, 2021, to April 30, 2021.
- Data collection included referral source (pediatric attending, resident, or nurse practitioner), patient demographic information, dental history, dental status during assessment, and number of dental visits to PDC 7 months post-assessment.
- Descriptive and statistical analysis was conducted. For statistical analysis, chi-square and Fisher's exact tests were performed.

Results

- 99 patients were enrolled in the program, all were recurring patients of PMC. Ages ranged from 1 to 16 years-old, with a median age of 2 years.
- 98% had fluoride varnish applied upon dental assessment (n=97)
- 79% of patients had good hygiene (n=78), 17% fair (n=17), and 4% poor (n=4); 22% of patients had visible decay (n=22)
- There was no statistical difference with regards to decay status or oral hygiene status and referral to PDC (P>0.05)
- Of those referred (n=47), 70% returned for a subsequent visit to PDC within 7 months (n=33)
- There was no statistical difference with regards to sex, referral source, oral hygiene status, or decay status and subsequent visits to PDC for those who were referred (P>0.05)

Table 1: Patient demographics and referral source (n=99)

	n (%)
Sex	
Male	53 (53)
Female	46 (47)
Referral Source	
Attending	53 (54)
Resident	36 (36)
Nurse Practitioner	10 (10)
Parent Preferred Language	
English	50 (51)
Spanish	43 (43)
Bengali	4 (4)
French	2 (2)

Table 2: Percentage of Referrals by Dental History (* = P<0.0001)

	% Referred
Have you ever seen a dentist?*	
Yes	12
No	100
Do you currently have a dentist?*	
Yes	2
No	100

Figure 1: Patient Referral to PDC and Reasons for No Referral to PDC (n=99)

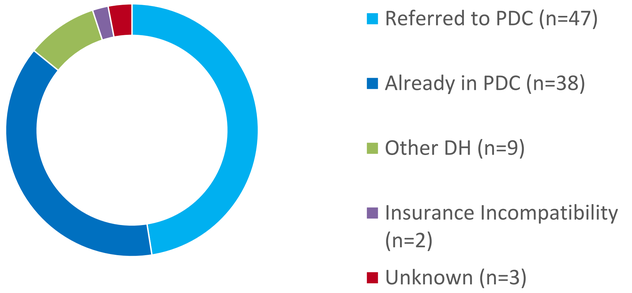
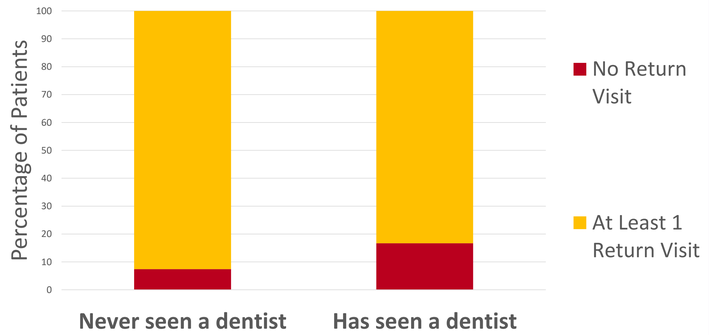


Figure 2: PDC Visits at 7 Months Post-Assessment by History of Prior Dental Visit (P<0.05)



Conclusion

- Developing a dental referral system with pediatric medical providers can help patients establish dental homes at an early age
- It is recommended to continue this study beyond the pilot program to evaluate these patients' dental outcomes 1 to 2 years post-assessment.
- These findings can act as a baseline comparison group as the program improves and incorporates a dental hygienist within PMC.

References

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