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Preventive Dental Service Utilization for Medicaid-Enrolled Children in New Hampshire: A Comparison of Care Provided by Pediatric Dentists and General Dentists

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Abstract

In this study, we compared preventive dental utilization through visits to a pediatric dentist (PD) vs. visits to a general dentist (GD) among Medicaid-enrolled children in New Hampshire (n=12,964). Dental claims were analyzed using conditional logistic regression models. After adjusting for covariates, children seen by a PD were 51% more likely to have received fluoride treatment, 26% more likely to have had at least two dental examinations, and 19% more likely to have received a sealant than children seen by a GD. Overall, our results suggest that children seen by a PD were more likely to have received preventive services than those seen by a GD. Because Medicaid-enrolled children are at increased risk for poor oral health, policies should be enacted to ensure that high-risk children receive appropriate and regular prevention-oriented dental care.

Keywords

dental Medicaid program; health care disparities; dental care for children; preventive dentistry; access to health care; pediatric dentistry; utilization

Previous studies have found that not all children enrolled in state Medicaid programs have access to dental care even though dental services are an entitlement under the 1967 Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) Program.^{1–6} Some children encounter access to care problems due to system-wide barriers such as a limited number of dentists accepting Medicaid while others face barriers because of parent-related factors such as low perceived need for dental care.^{7–9} Given the inverse relationship between income and caries prevalence¹⁰ and the fact that restorative care alone is unlikely to prevent future disease,^{11,12} prevention-oriented dental care, which includes regular dental prophylaxes (cleanings),¹³ topical fluoride applications,¹⁴ and dental sealants,¹⁵ is particularly important in ensuring good oral health among children on Medicaid.

In an attempt to improve access to dental care for Medicaid-enrolled children, a number of lawsuits have been filed by Medicaid beneficiaries alleging that state Medicaid programs are not in compliance with federal EPSDT laws.¹⁶ An example of recent litigation involves a class action lawsuit filed in 1999 by a parent on behalf of her Medicaid-eligible child against the New Hampshire (NH) Commissioner of Health and Human Services (*Hawkins et al. v. Commissioner*, Civil No. 99–143-JD).¹⁶ The plaintiffs in this case claimed that the state had violated a series of EPSDT laws, including failure 1) to inform beneficiaries of the EPSDT Program; 2) to provide transportation and appointment scheduling support; 3) to arrange for

dental screenings and treatment; 4) to ensure equal access; 5) to deliver services in a timely manner; and 6) to provide care statewide. In 2000, a federal court ruled that the grievances filed by the plaintiffs were enforceable. The NH dental Medicaid program was subsequently placed under a federal consent decree, which mandated substantial improvements in access to dental care for children. Based on a similar lawsuit filed in Texas in 1993, the U.S. Supreme Court ruled in 2004 that Medicaid consent decrees are enforceable.^{17,18}

The specialty of pediatric dentistry, which is comprised of clinicians who are well-versed in assessing a child's risk of developing caries and in delivering appropriate levels of preventive dental care based on the caries risk assessment, establishes clinical standards of child dental care via the American Academy of Pediatric Dentistry (AAPD) guidelines. This explains why pediatric dentists might be more likely to provide preventive care, especially for Medicaid-enrolled children at high-risk for caries. At the same time, general dentists who treat children are held to the AAPD clinical standards. Because most dentists in the U.S. are general dentists, it is likely that a large proportion of Medicaid-enrolled children depend on general dentists for dental care. However, few published studies have investigated potential differences in preventive dental care utilization for children seen by pediatric dentists and those treated by general dentists.^{19,20}

The purpose of this study was to assess preventive dental service utilization for children enrolled in the NH Medicaid program by comparing preventive dental care received by children who saw a pediatric dentist with the care received by those who saw a general dentist. Based on a cross-sectional study design, we tested the hypothesis that children seen by a pediatric dentist were more likely to have received preventive dental care than those seen by a general dentist. This hypothesis is based on the assumptions that pediatric dentists: 1) undergo at least two additional years of post-doctoral specialty training that emphasizes the prevention of dental disease; 2) are guided by standards of care described in the AAPD clinical guidelines; and 3) have patient pools consisting primarily of children and have auxiliary staff members experienced in pediatric dental care techniques.

This study is important because it will provide information regarding dental utilization in NH, which is the first step in assessing whether Medicaid-enrolled children have adequate access to preventive dental care. Our results may also help to identify potential factors associated with utilization of preventive dental care services in a high-risk population. For example, provider-based differences in the proportions of children having received preventive dental care may help to drive policies aimed at providing additional training for dentists who are not delivering appropriate levels of preventive dental care. Our ultimate goal is the development of policies that will enhance access to dental care and improve the oral health of all children from low-income families.

Methods

Data

The NH Medicaid fee-for-service program data consisted of enrollment files and dental claims files. These de-identified files were provided to NH Legal Assistance (NHLA) by the NH Department of Health and Human Services. One author acted as a consultant to the NHLA. The enrollment files included 77,228 children who were under age 21 years at any point during the period between and including February 1, 2002 and January 31, 2003. From the enrollment files, we selected for our analyses only children with a dental visit to either a pediatric dentist or general dentist (n=12,964). Also included in the enrollment files was the child's unique identification number and date of birth. The dental claims files included the child's unique identification number, any dental procedures received by the child and paid for by the Medicaid program, and information about the dentist who provided the treatment.

The enrollment and claims files were merged based on the child's unique identification number. There were 8,445 Medicaid-enrolled children in NH during the 12-month period seen by a pediatric dentist or general dentist for whom there was a claim for any preventive dental service. This study was approved by the Institutional Review Board of the University of Washington.

Study variables

Because the main exposure variable was dentist type, our analysis required that each child be categorized as having received his or her dental care exclusively from a pediatric dentist or general dentist. Thus, after estimating the overall dental utilization rate, Medicaid-enrolled children who did not receive any dental treatment during the study period were excluded from this study.

While the dental claims files included the name of the claim-submitting dentist, they did not include information on the provider's specialty status. An online telephone directory was consulted to determine whether the dentist was a general dentist or pediatric dentist. Dentist names were kept confidential; no data that would identify individual providers were reported.

A general dentist was defined as any dentist listed in the online telephone directory as a general dentist. A pediatric dentist was defined as a dentist who completed an accredited, post-dental school residency in pediatric dentistry or as a dentist recognized by the AAPD as board-certified or board-eligible in pediatric dentistry during the study period. A list of licensed pediatric dentists certified to practice in NH was provided by the NH Department of Health and Human Services. The AAPD website was used to confirm the status of each pediatric dentist. When provider classification was unclear (e.g., for claims submitted by a group dental practice), the dental office was contacted by telephone to verify the provider's classification. Less than one-half of one percent of children was seen in a group dental practice and all group practices represented in our data only employed general dentists—factors that helped to minimize the effects of potential provider misclassification. Children seen by both a general dentist and a pediatric dentist were excluded from the study a priori.

The main outcome variable was preventive dental service utilization. We developed several measures based on whether a child received: any preventive dental care, a dental prophylaxis, topical fluoride treatment, two topical fluoride treatments, or a pit and fissure sealant (Table 1). These measures were based on Current Dental Terminology (CDT) 4 and CDT 2005 codes found in the dental claims files.^{21,22} Each CDT 4 or CDT 2005 code consists of a five-character alphanumeric code that represents a particular dental procedure and is used for billing.

An additional dental home measure was created based on the assumption that children examined regularly by a dentist are more likely than those examined less regularly to receive prevention-oriented dental care. The AAPD defines a dental home as an “ongoing relationship between the dentist and the patient, inclusive of all aspects of oral health care delivery in a comprehensive, continuously accessible, coordinated, and family-centered way.”²³ This concept is difficult to operationalize using administrative data. Given this limitation, we created a dental-home measure by estimating the proportion of children during the study period with: 1) one comprehensive oral examination and one periodic oral examination; or 2) two periodic oral examinations (Table 1). The dental home measure is an approximation of the proportion of children examined by a dentist twice in a given 12-month period. It is a conservative estimate because it does not take into consideration date of receipt of dental care, which may bias our estimates toward children receiving an examination during the earlier part of the study period.

To assess if children receiving restorative treatment (e.g., dental fillings) also received preventive care, a dental restorative treatment measure was created based on children who received any composite (tooth-colored) or amalgam (silver) restoration (Table 1).

Because a child's age may be associated with dentist type and with preventive dental care utilization (e.g., fluoride treatment and dental sealant placement are age dependent), we evaluated child's age as a potential confounder.

We also assessed the need to account for being seen by a dentist who submitted claims on behalf of many Medicaid children versus those who saw fewer Medicaid-enrolled children. Indicator variables were created for providers who saw at least 50 unique Medicaid-enrolled children (0/1) and for those who saw at least 100 unique Medicaid-enrolled children (0/1). While these numbers are somewhat arbitrary, we saw no difference between the two variables in the multivariable logistic regression models. Thus, we only included the 50 or more unique Medicaid children variable in our analyses. Since expenditure data were not available, this variable served as a proxy for intensity of provider participation in the Medicaid program and was used instead of annual number of dollars reimbursed for services provided to Medicaid-enrollees.²⁴

Statistical analysis

In this study, we tested the following hypotheses:

- Children seen by a pediatric dentist were more likely to have had preventive dental care than children seen by a general dentist;
- Among seven- and eight-year-olds (after eruption of the permanent first molars) and 12- and 13-year-olds (after eruption of the permanent second molars), a larger proportion of children seen by a pediatric dentist received a dental sealant than of children seen by a general dentist;
- Among children with a dental home, children seen by a pediatric dentist were more likely to have had preventive dental care than children seen by a general dentist;
- Among children who received any amalgam or composite restoration, children seen by a pediatric dentist were more likely to have had preventive dental care than children seen by a general dentist.

Prior to testing our hypotheses, we estimated the following: 1) the proportion of children with a dental visit among all Medicaid-enrolled children; and 2) the proportion of children receiving preventive dental care among those with a dental visit to a pediatric dentist or general dentist. Descriptive statistics were generated on the study population. The t-test (equal variances assumed) was used to test for differences in means and the chi square test was used to test for differences in proportions ($\alpha=0.05$). Crude and covariate-adjusted odds ratios were estimated and 95% confidence intervals (95% CI) were reported. A multivariable conditional logistic regression model that included all relevant covariates was constructed to serve as a model for overall preventive dental care utilization. All data were analyzed using SPSS Version 12.0.²⁵

Results

Descriptive data

As a proportion of all Medicaid-enrolled children, 24.4% had at least one dental visit (18,880/77,228). Among Medicaid-enrolled children with a dental visit to a pediatric dentist or general dentist, 65.1% had any preventive dental care (8,445/12,964). These rates are

unadjusted for period of coverage.²⁶ Among those with a dental visit that included a preventive service, 2,410 were seen by a pediatric dentist and 6,035 by a general dentist.

During the study period, 254 dentists filed at least one Medicaid claim (26 pediatric dentists and 228 general dentists). The mean number of unique Medicaid-enrolled children seen by pediatric dentists was 127 (range: 1 to 682) and 42 for general dentists (range: 1 to 484).

Sixty-five dentists filed at least one Medicaid claim on behalf of 50 or more different children, which represents less than 26% of all providers in the study. Of these 65 providers, 15 were pediatric dentists (23%) and 50 were general dentists (77%). About 60% of all pediatric dentists and 22% of all general dentists submitted claims for at least 50 Medicaid children. Almost 77% of all dental claims during the study period were submitted by dentists (general and pediatric) who submitted Medicaid claims on behalf of 50 or more different children.

Table 2 summarizes the proportions of children with a preventive visit by dentist type. A significantly higher proportion of children enrolled in Medicaid seen by a pediatric dentist received any preventive dental care compared with those seen by a general dentist (73.2% *versus* 62.4%, $p < .0001$). About 14% of children seen by a pediatric dentist had a dental home compared to 12.1% of children seen by a general dentist ($p < .004$). About 68% of children seen by a pediatric dentist received a dental prophylaxis compared with 56.4% of children seen by a general dentist ($p < .0001$). Sixty-two percent of children seen by a pediatric dentist received a fluoride treatment, whereas only 44% of children seen by a general dentist received fluoride ($p < .0001$). There was no significant difference by provider type in the proportion of children with two topical fluoride treatments. Among children of all ages, 14% of children seen by a pediatric dentist received at least one dental sealant compared with 11.4% of children seen by a general dentist ($p < .0001$). Similar trends were identified for children ages 7 to 8 years and ages 12 to 13 years.

Table 3 summarizes the proportions of children receiving preventive dental care among those with a dental home by dentist type. Significantly higher proportions of children seen by a pediatric dentist also received preventive dental care compared with children seen by a general dentist. Differences were particularly noticeable for fluoride treatments. Nearly 78% of children with a dental home seen by a pediatric dentist and 60.6% seen by a general dentist had at least one fluoride treatment ($p < .0001$).

Table 4 summarizes the proportions of children receiving preventive dental care among those who received any amalgam or composite restoration by dentist type. Twenty-nine percent of all children received at least one amalgam or composite restoration. Among those who received a restoration, significantly higher proportions of children seen by a pediatric dentist also received preventive dental care compared with children seen by a general dentist. Less than 7% of children who received a restoration also received two fluoride treatments. However, there was no significant difference by provider type.

Regarding potential confounders, we found that the mean age of children seen by a pediatric dentist was 8.8 ± 4.2 years of age and 10.8 ± 4.5 years of age for children seen by a general dentist ($p < .0001$). Child age was also significantly associated with preventive dental care utilization. Being a provider who treated at least 50 Medicaid-enrolled children was significantly associated with provider type ($p < .0001$) and the four preventive dental care utilization measures ($p < .0001$). Both variables also confounded the relationship between provider type and the dental home measure. Therefore, child's age and intensity of provider participation in the Medicaid program were included in the final model.

Logistic regression model

Table 5 summarizes the crude and adjusted odds of having received preventive dental care. Prior to adjusting for child's age and being a provider who saw at least 50 Medicaid-enrolled children, children seen by a pediatric dentist were significantly more likely to have received any preventive dental care and to have a dental home. However, after adjusting for confounders, only the odds ratios for three of the five measures remained significant. Children seen by a pediatric dentist were 1.51 times as likely to have received fluoride, 1.19 times as likely to have received a sealant, and 1.26 times as likely to have had a dental home, as children seen by a general dentist.

After controlling for age, provider type, and being a dentist who treated 50 or more children enrolled in Medicaid, children with a dental home were 2.58 times as likely to have had a fluoride treatment (95% CI: 2.29, 2.90; $p < .0001$), 2.88 times as likely to have had a prophylaxis (95% CI: 2.50, 3.31; $p < .0001$), and 1.33 times as likely to have had a sealant (95% CI: 1.14, 1.54; $p < .0001$) compared with children with no dental home.

Finally, children who received at least one dental restoration were 23.5% less likely to have received fluoride (95% CI: 17.5, 29.1; $p < .001$), 44.9% less likely to have received a prophylaxis (95% CI: 40.5, 49.0; $p < .001$), but two times as likely to have had a sealant placed (95% CI: 1.80, 2.24; $p < .0001$) than children with no dental restorations. After adjusting for age, provider type, and seeing a dentist who treated 50 or more Medicaid children, children who received a restoration were still 12.6% less likely to have received fluoride (95% CI: 5.0, 19.6; $p < .002$), 39.6% less likely to have received a prophylaxis (95% CI: 33.5, 45.1; $p < .001$), but two times as likely to have had a sealant placed (95% CI: 1.82, 2.27; $p < .001$) than children with no restorations.

Discussion

The results of our study suggest that not all children enrolled in the NH Medicaid program who had a dental visit received preventive dental care. While 65.1% of Medicaid-enrolled children in our study with a dental visit to a pediatric dentist or general dentist received any preventive dental service, this number drops to 10.9% when taken as a proportion of all Medicaid-enrolled children (8,445/77,228). The latter estimate is far below preventive dental care utilization rates reported by Macek and colleagues who found that only 40% of children younger than age 18 years had had a diagnostic or preventive dental visit in the previous year.²⁷ Furthermore, the utilization rates in NH are far from the *Healthy People 2010* goal of increasing the proportion of low-income children with a preventive dental visit to 57%.²⁸ While it would be ideal from a prevention standpoint to see preventive dental utilization rates approach 100%, we recognize that not all children enrolled in Medicaid may be at increased risk for dental caries.²⁹ However, studies suggest that low socioeconomic status is a strong risk indicator for increased caries prevalence.^{4,30} Furthermore, only 42.7% of NH's population in 2002 was on public water systems receiving fluoridated water, which placed NH among the ten states with the lowest water fluoridation rates.³¹ These factors reinforce the importance of ensuring that Medicaid-enrolled children receive regular preventive dental care in the form of prophylaxes, fluoride treatments, and sealants.

The AAPD Guidelines state that all children should have a dental home.²³ We recognize that the validity of our dental-home measure could be improved by estimating the proportion of children with comprehensive or periodic examinations longitudinally, which would eliminate any bias associated with the point during the year at which a child received dental examinations. Given the limitation of our dental home measure, our results indicate that less than 13% of Medicaid-enrolled children with a dental visit had a dental home. While there was a statistically significant difference in the proportions of children with a dental home by

provider type, the clinical significance of a 2% difference is questionable, especially when the overall rate is so low. The proportion of children with a dental home is even lower when calculated as the total number of Medicaid-enrolled children (2.1%; 1,638/77,228) because there were more children in NH who failed to see a dentist than those who had a dental visit during our study period. We also found that higher proportions of children with a dental home received a prophylaxis, fluoride treatment, or sealant than those without a dental home, which suggests that having a dental home increases the likelihood of receiving certain preventive dental services. Increasing the number of children with a dental home by ensuring that high-risk children receive at least two dental examinations per year is a way to increase the likelihood that Medicaid-enrollees receive preventive dental services.

Furthermore, the AAPD Guidelines state that all children should have their first dental visit by age one.²³ Although the average age of children with a dental visit seen by pediatric dentists in NH was significantly lower than the average age of children seen by general dentists, it is clear that both provider groups are not seeing children at an early enough age. Consistently with previous findings, less than 1% of children with a dental visit were younger than two years of age.⁷ Early dental visits are beneficial from the perspective of preventing the onset of disease and in terms of reducing future dental-related treatment costs.³² These early visits also offer the opportunity for anticipatory guidance for parents. Given the role of diet and home care in disease prevention, this guidance may be more important than anything else. Furthermore, while utilization of any preventive dental care among those with a dental visit is in the 80% range for children ages 3 to 12 years, it is 60.7% among two-year-olds and 36.8% among one-year-olds. At the other end of the age scale, the proportion of children receiving preventive services begins to drop sharply at age 13 years (49.5%) and continues to decrease in older age groups. Less than 5% of children ages 18 to 20 years received preventive dental care. Future efforts should be directed at increasing access to dental care for infants and older teenagers.

We found statistically significant differences in the proportions of children who received any preventive dental care by pediatric dentists (73.2%) and general dentists (62.4%). A potential area of concern is our finding that among those who received at least one restoration, only 54.9% of children seen by a pediatric dentist received a fluoride treatment. The proportion was even lower among children seen by a general dentist (39.6%). While children with a restoration were significantly less likely to have received fluoride or a prophylaxis, it also appeared that these children were significantly more likely to have received a dental sealant. This may be an indication that children are failing to return for regular preventive care after restorations and sealants are placed. Because this was a cross-sectional study, we were unable to determine the direction of the relationship between receiving restorations and preventive treatments. However, these trends are potentially problematic because children requiring dental restorations often exhibit poor oral health, which can be improved by preventive measures such as frequent topical fluoride applications.

Finally, there is a large difference in the mean number of Medicaid-enrolled children seen by pediatric dentists and general dentists (127 and 42, respectively). According to the American Dental Association, there were over 600 active general dentists compared with only 24 pediatric dentists in NH in 2006.³³ Assuming that the dental workforce remained steady between 2002 and 2006 in NH, this means that nearly all pediatric dentists in NH treated Medicaid children whereas only one-third of general dentists treated and submitted dental claims on behalf of any Medicaid-enrolled children. While children seen by pediatric dentists were more likely than those seen by general dentists to have received preventive dental services, the access to care issue in NH cannot be solved by simply relying on the pediatric dental workforce. In addition to improving preventive dental service utilization

rates among Medicaid-enrolled children seen by general dentists, an emphasis should be placed on increasing the mean number of Medicaid-enrolled children seen by general dentists. One approach is to offer continuing dental education courses on behavior management techniques to general dentists with an interest in treating children. In addition, because there are no dental schools in NH, nationwide efforts must focus on exposing dental students to additional clinical experiences in pediatric dentistry,³⁴ increasing Medicaid reimbursement rates,³⁵ and providing case management services for the parents of Medicaid-enrolled children.³⁶ These are core features of programs designed to increase access to dental care (such as the Access to Baby and Child Dentistry (ABCD) Program in Washington State).^{36–40}

This study has several limitations. First, our analysis is based on administrative data, which limits our ability to draw a causal relationship between provider type and preventive dental service utilization. Another limitation is selection bias. This study analyzed claims submitted on behalf of Medicaid-enrolled children who had at least one dental visit, a population that may be healthier than demographically similar Medicaid-enrolled children without a dental visit. A third limitation is that utilization rates provide no information on current or future dental needs. While our study is based on the assumption that preventive dental care is effective at eliminating or reducing the prevalence of dental disease, we have no way of knowing the aggregate oral health status of the children whose claims we analyzed. The inability to adjust for differential disease risk exhibited by children seen by pediatric dentists and those seen by a general dentist is a major limitation of this study. Clinical data, which were not available, would have allowed us to assess baseline disease risk and to measure unmet dental needs. Finally, it is difficult to determine the generalizability of our estimated preventive dental care utilization rates for Medicaid-enrolled children to rates for other children, particularly those with private health insurance. While the issue of differential caries risk for children from these two different populations would need to be addressed, future studies should focus on assessing the relationship between insurance type and preventive dental care utilization.

Conclusions

Medicaid-enrolled children in NH with a dental visit and treated by a pediatric dentist were significantly more likely than those seen by a general dentist to have had preventive dental care. Among children with a dental home, those seen by a pediatric dentist were significantly more likely than children seen by a general dentist to have received preventive dental care. After adjusting for child's age, provider type, and having a provider who treated 50 or more Medicaid-enrolled children, those who received a dental restoration were significantly less likely to have received fluoride or a prophylaxis but significantly more likely to have received a sealant. Future interventions should focus on ensuring that Medicaid-enrolled children are provided with a dental home and that those who require dental restorations have regular access to preventive dental care.

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Table 1

Study Measures, Corresponding Current Dental Terminology (CDT)-4 and CDT 2005 Codes, and Brief Descriptions of Measure

Measure	CDT-4 and CDT 2005 code	Description of measure
Any preventive dental care	D1120, D1203, or D1351	Dental cleaning, professionally applied topical fluoride treatment, or pit and fissure sealant
Dental prophylaxis	D1120	Dental cleaning
Topical fluoride treatment	D1203	Professionally applied topical fluoride treatment
Two topical fluoride treatments	D1203 and D1203	Two professionally applied topical fluoride treatments
Pit and fissure sealant	D1351	Pit and fissure sealant
Dental home	D0150 and D0120 or, D0120 and D0120	One comprehensive oral evaluation and one periodic oral evaluation or two periodic oral evaluations
Restorative treatment	D2110, D2120, D2130, D2131, D2380, D2381, D2140, D2150, D2160, D2161, D2385, D2386, D2330, D2331, D2332, D2335, D2391, D2392, D2393, or D2394	One to four or more surface amalgam or composite dental restoration (filling)

Table 2

Among Children Enrolled in the New Hampshire Medicaid Program with at least One Dental Visit, Percentages of Children with Selected Dental Care by Provider Type

Provider type (n=number of children with at least one dental visit)	Any preventive dental care, % (n)	Prophylaxis, % (n)	Fluoride, % (n)	Two fluorides, % (n)	Sealant, all ages, % (n)	Sealant, ages 7-8, % (n)	Sealant, ages 12-13, % (n)	Dental home, % (n)	Restoration, % (n)
Pediatric dentists and general dentists (n=12,964)	65.1 (8,445)	59.3 (7,688)	48.6 (6,297)	7.1 (924)	12.2 (1,576)	24.5 (457)	16.8 (294)	12.6 (1,638)	29.0 (3,764)
Pediatric dentists (n=3,291)	73.2 (2,410) *	67.9 (2,233) *	62.0 (2,042) *	7.7 (252)	14.3 (471) *	28.2 (152) ***	20.2 (73) ***	14.1 (463) **	31.7 (1,043) *
General dentists (n=9,673)	62.4 (6,035)	56.4 (5,455)	44.0 (4,255)	6.9 (672)	11.4 (1,105)	23.1 (305)	15.9 (221)	12.1 (1,175)	28.1 (2,721)

* Significant difference between pediatric dentist and general dentist (p<0.0001)

** Significant difference between pediatric dentist and general dentist (p<0.01)

*** Significant difference between pediatric dentist and general dentist (p<0.05)

Table 3

Among Children Enrolled in the New Hampshire Medicaid Program with a Dental Home, Percentages of Children with Selected Preventive Dental Services by Provider Type

Provider type (n=number of children with a dental home)	Prophylaxis, % (n)	Fluoride, % (n)	Two fluorides, % (n)	Sealant, all ages, % (n)
Pediatric dentists and general dentists (n=1,638)	73.1 (1,197)	65.4 (1,071)	34.8 (570)	15.0 (245)
Pediatric dentists (n=463)	80.6 (373) *	77.5 (359) *	43.6 (202) *	17.5 (81) *
General dentists (n=1,175)	70.1 (824)	60.6 (712)	31.3 (368)	14.0 (164)

* Significant difference between pediatric dentist and general dentist ($p < 0.0001$)

Table 4

Among Children Enrolled in the New Hampshire Medicaid Program with any Amalgam or Composite Dental Restoration, Percentages of Children with Selected Preventive Dental Services by Provider Type

Provider type (n=number of children with any amalgam or composite dental restoration)	Prophylaxis, % (n)	Fluoride, % (n)	Two fluorides, % (n)	Sealants, all ages, % (n)
Pediatric dentists and general dentists (n=3,764)	49.0 (1,843)	43.8 (1,650)	6.6 (249)	17.9 (674)
Pediatric dentists (n=1,043)	60.5 (631) *	54.9 (573) *	7.2 (75)	21.7 (226) **
General dentists (n=2,721)	44.5 (1,212)	39.6 (1,077)	6.4 (174)	16.5 (448)

* Significant difference between pediatric dentist and general dentist ($p < 0.0001$)

** Significant difference between pediatric dentist and general dentist ($p < 0.05$)

Table 5

Crude and Adjusted^{*} Odds Ratios^{**} Reflecting Likelihood of Having Received Selected Measure Among Children Enrolled in the New Hampshire Medicaid Program Seen by a Pediatric Dentist Compared to Children Seen by General Dentist (n=12,964)

Measure	Crude OR (95% Confidence Interval)	Adjusted OR (95% Confidence Interval)
Any preventive dental care	1.65 (1.51, 1.80)	0.99 (0.89, 1.10)
Prophylaxis	1.63 (1.50, 1.77)	0.94 (0.84, 1.04)
Fluoride	2.08 (1.92, 2.26)	1.51 (1.38, 1.65)
Sealant	1.30 (1.15, 1.45)	1.19 (1.05, 1.34)
Dental home	1.18 (1.06, 1.33)	1.26 (1.12, 1.43)

* Adjusted for child's age and being a provider who saw at least 50 Medicaid children

** Reference group is general dentist