Annual Report on Children's Health Care: Dental and Orthodontic Utilization and Expenditures for Children, 2010–2012

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ABSTRACT

OBJECTIVE: To examine general dental and orthodontic utilization and expenditures by health insurance status, public health insurance eligibility, and sociodemographic characteristics among children aged 0 to 17 years using data from 2010–2012.
METHODS: Nationally representative data from the Medical Expenditure Panel Survey (2010–2012) provided data on insurance status, public health insurance eligibility, and visits to dental providers for both general dental care and orthodontic care.
RESULTS: Overall, 41.9% of US children reported an annual dental office–based visit for general (nonorthodontic) dental care. Fewer Hispanic (34.7%) and non-Latino black children (34.8%) received dental care compared to non-Hispanic whites (47.3%) and Asians (40.3%). Children living in families with the lowest income were also the least likely to have a visit (32.9%) compared to children in the highest-income families (54.7%). Among children eligible for public coverage, Medicaid-eligible children had the lowest percentage of preventive dental visits (29.2%). Socioeconomic and racial/ethnic disparities in use and expenditures for orthodontic care are much greater than those for general and preventive dental care. Average expenditures for orthodontic care were $1,823, of which 56% ($1,023) was paid out of pocket by families.
CONCLUSIONS: Our findings provide a baseline assessment for examining trends in the future, especially as coverage patterns for children may change as the Affordable Care Act is implemented and the future of the State Child Health Insurance Program remains uncertain beyond 2017.

KEYWORDS: dental care; dental utilization; disparities; eligibility; expenditures; low income; public insurance; race/ethnicity

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IN 2000, THE Surgeon General released the first report on oral health.[1] The report highlighted many of the vulnerabilities of children for poor oral health due to birth defects, caries, and injuries. It also underscored the sharp disparities in access to dental care, especially for socioeconomically disadvantaged and racial/ethnic minority children. Recent analyses indicate that children have experienced an increase in dental care use, defined as at least one visit in the past year, but more than half of children still do not have such a visit.[2] Despite this positive trend, disparities by socioeconomic status and race/ethnicity persist.[2–5] In addition, children with special health care needs may face even more difficulty in getting dental services, especially those with severe neurodevelopmental disabilities.[6–8] The importance of access to care, especially early preventive care, is underscored by the fact that for children aged 2 to 4 years, the rate of caries has increased,[9] although early data from the 2011–2012 National Health Interview Survey suggest that the rate may have plateaued or decreased.[10]

An important determinant of access to dental care is health insurance. Compared to children without any insurance (not just dental insurance), those with either private or public insurance are more likely to receive preventive dental care.[11,12] Thus, the rapid expansion of access to insurance through Medicaid and the State Child Health Insurance Program (SCHIP) has resulted in increases in access and reductions in unmet needs.[13] In particular, oral health is a strong component of SCHIP.[14] Although mandated through the Early, Periodic, Screening, Diagnosis and Treatment program under Medicaid, worse access to dental care for children covered by Medicaid compared to other types of insurance may be due to low reimbursement rates.[11]

The importance of early and regular dental care for children is underscored in the Surgeon General's report, both in terms of immediate pain and difficulty eating, but also longer term over the life span.[1] Early dental care results in decreased dental disease,[15] is targeted toward the age group for which the rate of caries is increasing,[5] and is cost-effective in reducing the need for subsequent reparative work.[16] On the basis of evidence such as this, the American Academy of Pediatrics recommends that dental care should begin by the age of 1 year.

This report is the 12th in a series of descriptive articles summarizing various dimensions of health care for children and youth in America.[17–27] Despite the importance of oral health for children, to date, we have not examined utilization and expenditures for oral health services. This year's report will serve as a baseline assessment for

Table 1. Children's Dental Utilization (2010–2012 Pooled)*

	Total No. of Children (in Thousands)		Office-Based Visits for General (Nonorthodontic) Dental Care	
Characteristic	n	SE	Any Dental Visit, %	SE, %
All children (age 0–18)	71,700	1,903	41.9	0.8
Health insurance coverage (annual)				
Any private during the year	40,400	1,324	48.6	1.0
Only public during the year	26,900	1,052	35.2	0.8
Uninsured all year	4,387	256	21.1	1.7
Dental insurance				
Had dental coverage	30,300	1,054	49.4	1.2
Had no dental coverage	41,400	1,322	36.4	0.7
Public insurance eligibility				
Eligible	40,900	1,358	36.0	0.7
Medicaid eligible	25,300	1,021	32.9	0.8
CHIP eligible	15,600	580	41.1	1.3
Ineligible <400 FPL	13,500	535	43.2	1.5
Age				
0–2 y	11,300	391	15.2	0.8
3–4 y	7,611	262	43.1	1.3
5–9 y	18,900	550	51.8	1.1
10–14 y	18,400	598	49.4	1.0
15–18 y	15,500	508	39.9	1.2
Sex				
Male	36,600	1,014	41.2	0.8
Female	35,000	978	42.7	0.9
Race/ethnicity				
White, non-Hispanic	38,600	1,429	47.3	1.1
Black, non-Hispanic	11,500	644	34.8	0.9
Asian, non-Hispanic	3,643	310	40.3	1.9
Other or multirace, non-Hispanic	1,133	203	44.7	5.2
Hispanic	16,700	1,180	34.7	1.0
Poverty				
0–138% FPL	26,400	1,040	32.9	0.8
139–250% FPL	14,800	546	39.9	1.3
251–400% FPL	13,000	478	45.6	1.7
>400% FPL	17,500	753	54.7	1.4
Perceived health status				
Excellent, very good, good	69,800	1,843	42.0	0.8
Fair or poor	1,843	106	39.2	2.1
Region				
Northeast	11,700	732	42.7	2.1
Midwest	15,400	785	47.2	1.7
South	26,900	1,049	37.9	1.0
West	17,600	1,003	43.0	1.8
MSA				
MSA	60,900	1,812	42.8	0.8
Non-MSA	10,800	1,040	37.0	1.8
Highest parental education				
No HS degree	8,823	552	31.1	1.2
HS degree	21,600	776	34.4	0.9
HS degree + some college	15,500	517	40.6	1.2
Bachelors degree	15,100	686	51.1	1.6
Advanced degree	10,100	577	56.5	1.8

CHIP indicates Children's Health Insurance Program; MSA, metropolitan statistical area; FPL, federal poverty level; SE, standard error; and HS, high school.

*Office visits during the year; pooled cross-sectional, annualized average estimates of percentage with visits during year are provided.
Source: Medical Expenditure Panel Survey, Agency for Healthcare Research and Quality.