



**2012 Survey of Dental Practice**  
**Pediatric Dentists in Private Practice**  
**CHARACTERISTICS REPORT**



## INTRODUCTION

The American Dental Association's Health Policy Resources Center mailed the 2012 *Survey of Dental Practice* to dentists to collect information about the previous year of operation, 2011. For this survey year, the American Academy of Pediatric Dentistry Pediatric Oral Health Research and Policy Center collaborated on the survey and pediatric dentists were oversampled in order to obtain enough responses from those specialists to allow for reliable statistical analysis. The survey focused on aspects of private practice including characteristics of dentists and patients, operating room use, charitable care, and employment of non-dentist personnel.

In April 2012, the three-page questionnaire was mailed to a national random sample of dentists in private practice regardless of membership status in the American Dental Association. The sample was made up of approximately 16,000 dentists, including about 4,000 pediatric dentists. The percentage of pediatric dentists in the sample exceeded the percentage of specialists in the dental population in order to provide an adequate number of responses from the specialty for statistical analysis. Non-respondents received an additional opportunity to participate, receiving another copy of the survey at the end of May 2012. Data collection was completed in July 2012, resulting in 781 responses from pediatric dentists. The final adjusted overall response rate from all dentists was 16.5%, while the response rate among pediatric dentists was 18.9%.

This report presents an overview of survey results for pediatric dentists. For additional information or custom analysis of the survey data, please contact the ADA Health Policy Resources Center at 312.440.2568 or [survey@ada.org](mailto:survey@ada.org).

Data collected by the 2012 survey and historical trend information start with Table 1 on page 5. The following two pages include key findings from the survey for pediatric dentists.

## KEY FINDINGS

### Demographics

Tables 1 through 25 (starting on page 5) summarize characteristics of pediatric dentists, their practices, and their patients. Results are grouped by employment situation, dentist gender, and perceived workload (busyness).

- **Female pediatric dentists tend to be younger than male pediatric dentists.** The average age of pediatric dentists in 2011 was 50.9 overall, 54.4 for males, and 43.9 for females. (See Table 3.)
- **Most pediatric dental practices have one dentist in the practice.** Practices with one dentist accounted for 69.8% of all pediatric dental practices in 2011; 19.6% of practices had two dentists, and 10.6% of practices had three or more dentists. (See Table 7.)
- **Busyness increases as county population decreases.** While 34.0% of pediatric dentists reported that they were “not busy enough” in counties with more than 1.5 million people, only 25.3% of pediatric dentists reported the same in counties with populations of 88,001 to 275,000. (See Table 14.)
- **Incidence of patients on public assistance increases as county population decreases.** Among pediatric dentists' patients, a proportion is covered by a public assistance program that paid for at least a part of their dental care. This proportion of patients was 17.9% in counties with the highest populations but 41.9% in counties with the lowest populations. (See Table 18 and Figure 6.)

### Operating Room Use, Special Health Care Needs, and Charitable Care

Tables 26 through 30 (starting on page 22) summarize characteristics of pediatric dentists' use of operating rooms, their patients with special

health care needs, and charitable care provided by the dental practice. Results are grouped by employment situation.

- **Most pediatric dentists use operating rooms.** The share of pediatric dentists who use an operating room in a hospital or accredited surgical facility for treatment of inpatient and/or outpatient cases is 59.5%. (See Table 26.)
- **Most pediatric dentists report treating patients with special health care needs.** The proportion of pediatric dentists treating patients with special health care needs is 99.5%. (See Table 28.)
- **Most practices of pediatric dentists provide charitable care.** Almost three-quarters, or 73.6%, of pediatric dentists worked in practices that provided charitable dental care either free of charge or at a reduced rate to some patients in 2011. When a reduced fee was offered, the average percent reduction was 25.3%. (See Table 29.)

## Employment of Personnel

Tables 31 through 35 (starting on page 28) summarize characteristics of non-dentist staff of pediatric dentists.

- **Most practices of pediatric dentists employ chairside assistants, secretaries/receptionists, and dental hygienists.** The three non-dentist staff positions most commonly employed in practices of pediatric dentists are chairside assistants (97.9%), secretaries/receptionists (95.3%), and dental hygienists (54.6%). (See Table 31.)

## **CHARACTERISTICS OF PEDIATRIC DENTISTS**

## SUMMARY

The *2012 Survey of Dental Practice* of the American Dental Association's Health Policy Resources Center portrays a pediatric dentistry specialty that has changed over the last decade and now represents a segment of the profession more representative of the population, one committed to addressing access to care for low income and rural populations, and one which demonstrates successful practice characteristics aimed at efficiency and effectiveness. The following is a summary of the specialty demographics excerpted from the latest survey.

### Gender Balance

The survey demonstrates that the percentage of women in pediatric dentistry is increasing. Women pediatric dentists comprise about 44 percent of the specialty, as indicated by the AAPD member database. This is reflective of gender-related changes in career choice, and a more balanced dental school acceptance process based on merit. The survey also disputes the opinion that women dentists work fewer hours than their male counterparts, with women pediatric dentists differing from males by only about an hour per work week. Female and male dentists also tend to view their workloads very similarly.

### Contribution to Access

The contemporary pediatric dental practice demonstrates the specialty's commitment to access to care. The specialty appears to have taken the banner of improving access. In 1998, government programs accounted for only about 12 percent of practice billings, but by 2012, that percentage had risen to almost 23 percent. Close to 70% of pediatric dentist treat Medicaid, CHIP or both. Over half of the pediatric dentists accept new Medicaid patients, a good sign for those children who will be covered as a result of the Affordable Care Act. Almost 60 percent of pediatric dentists report using the operating room, providing a source of care for very young and special needs patients. The use of dental anesthesiologists is widespread with over a third of pediatric dentists reporting use of this important access-expander. Not surprisingly, almost all pediatric dentists (99.5 percent) report that they care for patients with special needs. While most pediatric dental patients are under 17 years of age, about 5 percent of their patients are older with some patients well into the 7<sup>th</sup> decade of life. This is possibly a further indicator of the commitment of pediatric dentists to persons with special health care needs throughout their

lifespan and the need for progress in patient transition to adult-oriented providers.

The survey suggests that the pediatric dentist in the small town may be a major point of dental access for rural children. Of all population densities in the study, counties with 88,000 or fewer people saw pediatric dentists with the most patients on public assistance, the most patient visits in a year, more walk-in emergencies, and the least likely to feel that they could be busier. One implication of this finding is that pediatric dentists in these communities are providing consistent dental home services across socioeconomic strata and by doing so, helping to maintain a single standard of care for all children. Another implication is that preventive services are more available to higher caries-risk children in these communities than in larger population-dense areas.

### Practice Efficiencies and Opportunities

The literature suggests that non-biologic social determinants of health play a role in the initiation of dental caries. The practice that can address these factors may be better positioned to care for a wider variety of patients and provide preventive services. Pediatric dentists almost uniformly employ dental assistants and over half of them employ dental hygienists. The staffing patterns suggest that there are opportunities to perform early intervention, apply sealants and fluoride varnish. Pediatric dentists appear to be well-positioned for care coordination with almost all employing receptionists and about one quarter with a financial coordinator.

### Implications of the Affordable Care Act

Under the Patient Protection and Affordable Care Act (PPACA), it is projected that three million additional children will gain access to dental benefits through the state health insurance exchanges by 2018.<sup>1</sup> This represents a five percent increase over the number of children currently insured by commercial dental benefit plans. In addition, it is expected that an additional significant number of children will gain dental benefits outside of the health insurance exchanges through employer-sponsored dental plans with dependent coverage. Since many of these children will be entering the dental delivery system for the first time, or will have accessed it only rarely or sporadically in the past, they can be expected to exhibit a higher burden of dental disease and treatment needs than the currently-insured population.

General dentists will play an important role in providing care for this newly insured population. Studies, however, indicate relatively few general dentists provide regular care for children under three years of age and 69.5 percent of dentists report that fewer than 20 percent of their patients are children.<sup>2</sup> The survey data indicates pediatric dentists will be well-positioned to provide for this expected additional demand for services

under the PPACA, as they can expand existing office delivery capacity (Tables 8, 12), have high rates of access to the operating room (Table 26) or utilize an anesthesiologist in the office (Table 27), and almost without exception provide care for patients with special healthcare needs (Table 28). They also report that over 40% of their patients are under five years of age (Table 15 and Figure 3).

**Table 1: Age of Responding Pediatric Dentists, 2011**

<i>Pediatric Dentists</i>	<i>Average age</i>	<i>Under 35</i>	<i>35-44</i>	<i>45-54</i>	<i>55-64</i>	<i>65 and older</i>	<i>Total N</i>
All owners	51.8	6.3%	24.1%	24.8%	30.0%	14.8%	630
Solo practitioners	51.6	--*	24.0	24.3	30.0	14.1	333
Nonsolo owners	52.1	--	24.2	25.3	30.0	15.5	297
Employed	44.9	32.3	32.3	--	--	--	93
<b>All pediatric dentists</b>	<b>50.9</b>	<b>10.0</b>	<b>25.6</b>	<b>21.8</b>	<b>26.6</b>	<b>16.0</b>	<b>751</b>

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 2: Average Age of Responding Pediatric Dentists, 1998 – 2011**

<i>Pediatric Dentists</i>	<i>1998</i>	<i>2001</i>	<i>2005</i>	<i>2009</i>	<i>2011</i>
All owners	49.0	51.2	51.0	51.5	51.8
Solo practitioners	49.1	51.0	51.8	52.4	51.6
Nonsolo owners	48.9	51.4	49.9	50.6	52.1
Employed	40.6	47.6	40.4	42.8	44.9
<b>All pediatric dentists</b>	<b>48.3</b>	<b>50.9</b>	<b>49.8</b>	<b>50.4</b>	<b>50.9</b>

Source: American Dental Association, Health Policy Resources Center, *Surveys of Dental Practice*.

**Table 3: Age of Responding Pediatric Dentists by Gender, 2011**

<i>Pediatric Dentists</i>	<i>Average age</i>	<i>Under 35</i>	<i>35-44</i>	<i>45-54</i>	<i>55-64</i>	<i>65 and older</i>	<i>Total N</i>
Males	54.4	--	19.5%	19.1%	33.1%	22.7%	502
Females	43.9	18.6%	37.9	27.4	13.7	--	248
<b>All pediatric dentists</b>	<b>50.9</b>	<b>10.0</b>	<b>25.6</b>	<b>21.8</b>	<b>26.6</b>	<b>16.0</b>	<b>751</b>

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

\* This category had too few responses to allow for reliable statistical analysis.

**Table 4: Average Age of Responding Male Pediatric Dentists, 1998 – 2011**

<i>Pediatric Dentists</i>	<i>1998</i>	<i>2001</i>	<i>2005</i>	<i>2009</i>	<i>2011</i>
All owners	50.3	52.7	53.2	53.9	54.3
Solo practitioners	50.3	52.5	53.8	54.5	54.3
Nonsolo owners	50.4	53.1	52.3	53.3	54.3
Employed	--*	--	--	48.7	53.3
<b>All pediatric dentists</b>	50.1	53.2	52.8	53.7	54.4

Source: American Dental Association, Health Policy Resources Center, *Surveys of Dental Practice*.

**Table 5: Average Age of Responding Female Pediatric Dentists, 1998 – 2011**

<i>Pediatric Dentists</i>	<i>1998</i>	<i>2001</i>	<i>2005</i>	<i>2009</i>	<i>2011</i>
All owners	41.1	43.1	44.1	45.6	46.1
Solo practitioners	41.5	42.8	44.4	46.5	46.1
Nonsolo owners	40.4	43.5	43.8	44.9	46.1
Employed	--	--	--	38.7	36.6
<b>All pediatric dentists</b>	39.9	41.9	42.1	43.8	43.9

Source: American Dental Association, Health Policy Resources Center, *Surveys of Dental Practice*.

<sup>1</sup> This category had too few responses to allow for reliable statistical analysis.



**Table 6: Current Employment Status of Pediatric Dentists by Years since Graduation, 2011**

<i>Pediatric Dentists</i>	<i>Years since Graduation</i>				<i>Total N</i>
	<i>10 or less</i>	<i>11 to 20</i>	<i>21 or more</i>	<i>All years</i>	
Sole proprietor	44.8%	62.8%	65.6%	60.7%	455
Partner	--*	23.8	25.2	23.5	176
Employee	33.1	--	--	12.9	97
Independent contractor	--	--	--	--	22
<b>Total</b>	100.0	100.0	100.0	100.0	750

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 7: Distribution of Dentists in the Private Practice of Pediatric Dentists, 2011**

<i>Pediatric Dentists**</i>	<i>Number of Dentists</i>			<i>Number of Owner Dentists</i>			<i>Number of Nonowner Dentists</i>		
	<i>One</i>	<i>Two</i>	<i>Three or more</i>	<i>One</i>	<i>Two</i>	<i>Three or more</i>	<i>Zero</i>	<i>One</i>	<i>Two or more</i>
All owners	75.4%	16.6%	7.9%	86.7%	10.4%	2.9%	84.6%	11.5%	4.0%
Solo practitioners	100.0	--	--	100.0	--	--	100.0	--	--
Nonsolo owners	--	67.7	32.3	45.7	42.3	12.0	37.3	46.7	16.1
Employed	--	57.0	39.6	85.1	--	--	--	66.3	33.7
<b>All pediatric dentists</b>	69.8	19.6	10.6	86.4	10.5	3.1	78.0	15.7	6.3

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

\* This category had too few responses to allow for reliable statistical analysis.

\*\* The percentages in this group have been weighted by the inverse of the number of dentists in the practice. For more details regarding weights, please see page 31.

## SYSTEM CAPACITY AND ACCESS TO ORAL HEALTH SERVICES

Oral health advocates have debated extensively in recent years over the capacity of the current dental delivery system to meet the oral health needs of the population, especially for the Medicaid population and patients with special healthcare needs.<sup>3,4,5</sup> In fact, under the Patient Protection and Affordable Care Act (PPACA), a *National Health Care Workforce Commission* is established, for which oral health care workforce capacity is a designated high priority area for review.<sup>6</sup>

While the survey cannot provide definitive answers to dental service capacity questions, it does indicate (Table 12) that one-quarter of pediatric dentists have the facilities, ability and willingness to easily expand services. Especially significant, from an access to care perspective, is that close to 70% of pediatric dentists report accepting patients covered by public assistance programs (Medicaid and CHIP) (Table 19), which comprise slightly over 25% of their patient population (Table 17). In regards to the treatment of patients with special healthcare or developmental needs, virtually all pediatric dentists report including this population in their practice (Table 28).

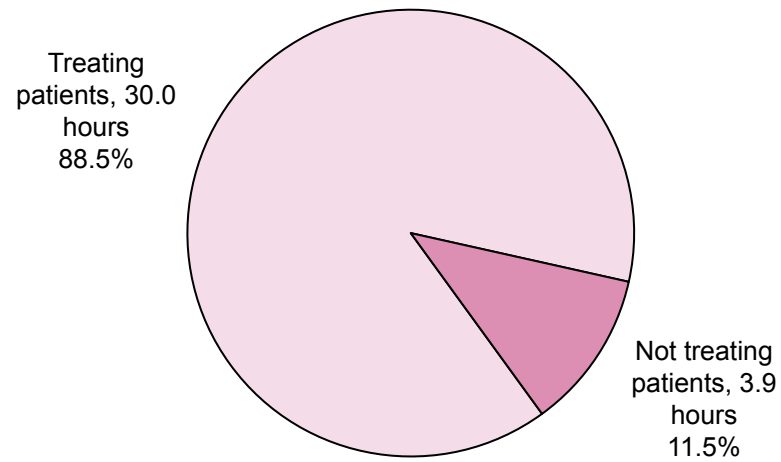
**Table 8: Time Spent in the Primary Private Practice of Pediatric Dentists, by Employment Situation, 2011**

	Weeks per Year (Average)		Hours per Week (Average)		Hours per Year (Average)	
	<i>In the dental office</i>	<i>Practice is open*</i>	<i>In the dental office</i>	<i>Treating patients</i>	<i>In the dental office</i>	<i>Treating patients</i>
<i>Pediatric Dentists</i>						
All owners	47.4	48.4	35.0	30.8	1,668.1	1,465.1
Solo practitioners	47.6	47.9	35.7	31.3	1,708.0	1,495.8
Nonsolo owners	47.3	50.1	34.2	30.2	1,624.1	1,431.1
Employed	45.9	50.2	29.8	27.4	1,382.8	1,268.1
<b>All pediatric dentists</b>	<b>47.2</b>	<b>48.6</b>	<b>33.9</b>	<b>30.0</b>	<b>1,612.3</b>	<b>1,424.3</b>

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

\* The averages in this group have been weighted by the inverse of the number of dentists in the practice. For more details regarding weights, please see page 31.

**Figure 1: Average Hours per Week in the Dental Office, All Pediatric Dentists, 2011**



Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 9: Time Spent in the Primary Private Practice of Pediatric Dentists, by Gender, 2011**

	<i>Weeks per Year (Average)</i>		<i>Hours per Week (Average)</i>		<i>Hours per Year (Average)</i>	
	<i>In the dental office</i>	<i>Practice is open*</i>	<i>In the dental office</i>	<i>Treating patients</i>	<i>In the dental office</i>	<i>Treating patients</i>
<i>Pediatric Dentists</i>						
Male	47.2	48.6	34.3	30.7	1,633.4	1,459.6
Female	47.2	48.6	33.1	28.6	1,573.9	1,354.9
<b>All pediatric dentists</b>	47.2	48.6	33.9	30.0	1,612.3	1,424.3

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

\* The averages in this group have been weighted by the inverse of the number of dentists in the practice. For more details regarding weights, please see page 31.

**Table 10: Time Spent in the Primary Private Practice of Male Pediatric Dentists, by Age, 2011**

	Weeks per Year (Average)		Hours per Week (Average)		Hours per Year (Average)	
	<i>In the dental office</i>	<i>Practice is open*</i>	<i>In the dental office</i>	<i>Treating patients</i>	<i>In the dental office</i>	<i>Treating patients</i>
<i>Pediatric Dentists</i>						
Under 35	--**	--	--	--	--	--
35-44	48.3	48.7	35.9	32.5	1,733.3	1,571.5
45-54	48.1	49.0	36.0	32.4	1,734.6	1,557.3
55-64	47.2	48.4	34.9	30.8	1,647.7	1,452.9
65 and older	45.2	48.2	29.5	26.5	1,361.4	1,220.5
<b>All male pediatric dentists</b>	47.2	48.6	34.3	30.7	1,633.4	1,459.6

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 11: Time Spent in the Primary Private Practice of Female Pediatric Dentists, by Age, 2011**

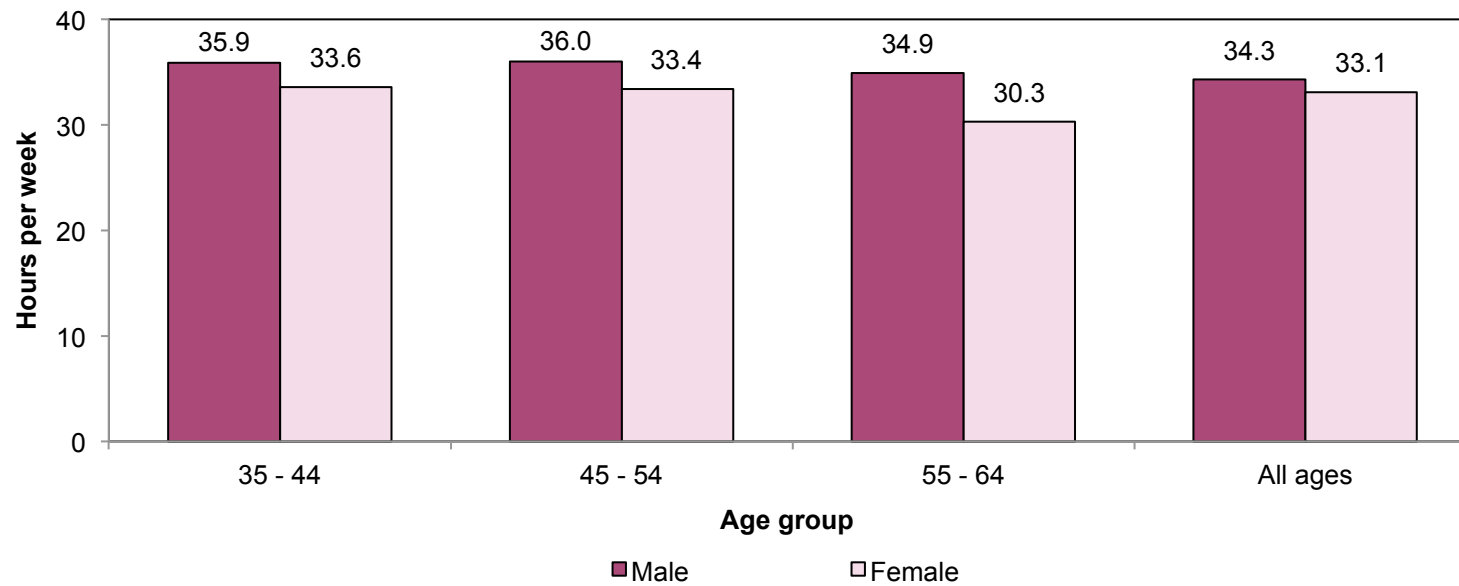
	Weeks per Year (Average)		Hours per Week (Average)		Hours per Year (Average)	
	<i>In the dental office</i>	<i>Practice is open*</i>	<i>In the dental office</i>	<i>Treating patients</i>	<i>In the dental office</i>	<i>Treating patients</i>
<i>Pediatric Dentists</i>						
Under 35	47.2	49.4	34.7	30.4	1,643.5	1,432.3
35-44	47.7	49.1	33.6	28.7	1,619.0	1,376.3
45-54	47.1	48.4	33.4	28.9	1,597.2	1,365.5
55-64	46.4	46.8	30.3	26.8	1,400.2	1,254.5
65 and older	--	--	--	--	--	--
<b>All female pediatric dentists</b>	47.2	48.6	33.1	28.6	1,573.9	1,354.9

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

\* The averages in this group have been weighted by the inverse of the number of dentists in the practice. For more details regarding weights, please see page 31.

\*\* This category had too few responses to allow for reliable statistical analysis.

**Figure 2: Pediatric Dentists' Average Hours per Week in the Dental Office, Selected Age Groups, by Gender, 2011**



Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 12: Perceived Workload of Pediatric Dentists, by Employment Situation, 2011**

<i>Pediatric Dentists</i>	<i>Too busy to treat all</i>	<i>Treated all but overworked</i>	<i>Treated all but not overworked</i>	<i>Not busy enough</i>	<i>Total N</i>
All owners	7.2%	16.6%	48.8%	27.4%	627
Solo practitioners	--*	15.1	46.5	30.5	331
Nonsolo owners	--	18.2	51.4	24.0	296
Employed	--	--	47.9	--	94
<b>All pediatric dentists</b>	<b>7.2</b>	<b>16.2</b>	<b>49.3</b>	<b>27.3</b>	<b>747</b>

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

\* This category had too few responses to allow for reliable statistical analysis.

**Table 13: Perceived Workload of Pediatric Dentists, by Gender, 2011**

<i>Pediatric Dentists</i>	<i>Too busy to treat all</i>	<i>Treated all but overworked</i>	<i>Treated all but not overworked</i>	<i>Not busy enough</i>	<i>Total N</i>
Male	6.0%	16.3%	49.9%	27.8%	497
Female	--*	16.1	48.2	26.1	249
<b>All pediatric dentists</b>	<b>7.2</b>	<b>16.2</b>	<b>49.3</b>	<b>27.3</b>	<b>747</b>

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 14: Perceived Workload of Pediatric Dentists, by County Population, 2011**

<i>Pediatric Dentists</i>	<i>Too busy to treat all</i>	<i>Treated all but overworked</i>	<i>Treated all but not overworked</i>	<i>Not busy enough</i>	<i>Total N</i>
88,000 or less	--	--	--	--	55
88,001 to 275,000	--	--	43.7%	25.3%	158
275,001 to 675,000	--	--	52.8	26.4	182
675,001 to 1,500,000	--	--	51.4	29.3	181
1,500,001 or more	--	--	51.4	34.0	144
<b>All pediatric dentists</b>	<b>7.2%</b>	<b>16.2%</b>	<b>49.3</b>	<b>27.3</b>	<b>747</b>

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

\* This category had too few responses to allow for reliable statistical analysis.

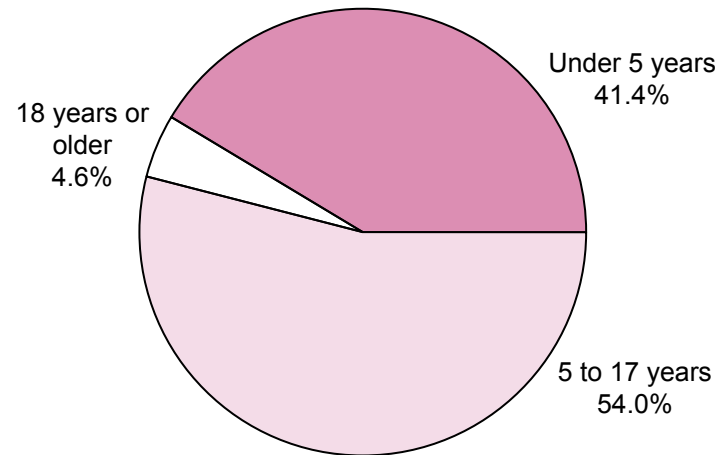
## PATIENT CHARACTERISTICS

**Table 15: Distribution of Patient Ages in the Primary Private Practice of Pediatric Dentists, by Employment Situation, 2011**

<i>Pediatric Dentists*</i>	<i>Under 5 years</i>	<i>5 to 17 years</i>	<i>18 to 34 years</i>	<i>35 to 54 years</i>	<i>55 to 64 years</i>	<i>65 years or older</i>	<i>Total N</i>
All owners	41.2%	54.3%	3.7%	0.5%	0.3%	0.1%	574
Solo practitioners	42.1	53.8	3.4	0.4	0.2	0.1	310
Nonsolo owners	38.4	55.8	4.4	0.8	0.4	0.2	264
Employed	42.5	51.4	4.7	0.6	0.5	0.3	73
<b>All pediatric dentists</b>	<b>41.4</b>	<b>54.0</b>	<b>3.7</b>	<b>0.5</b>	<b>0.3</b>	<b>0.1</b>	<b>666</b>

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Figure 3: Distribution of Patient Ages in the Primary Private Practice of All Pediatric Dentists, 2011**



Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

\* The percentages and averages in this group have been weighted by the inverse of the number of dentists in the practice. For more details regarding weights, please see page 31.



**Table 16: Distribution of Patient Gender in the Primary Private Practice of Pediatric Dentists, by Employment Situation, 2011**

	<i>Gender</i>	
<i>Pediatric Dentists*</i>	<i>Male</i>	<i>Female</i>
All owners	49.2%	50.8%
Solo practitioners	49.2	50.8
Nonsolo owners	49.2	50.8
Employed	49.1	50.9
<b>All pediatric dentists</b>	49.2	50.8

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

Tables 17 and 19 require some explanation. Table 17 reports the percentage of patients in pediatric dental practices covered by commercial, public assistance, and no dental benefit programs. Pediatric dentists reported that, in the aggregate, 25.5% of their patients were

covered by public assistance programs. This is different from the information in Table 19, which reports that close to 70% of pediatric dentists report accepting patients covered by public assistance programs (Medicaid and CHIP)

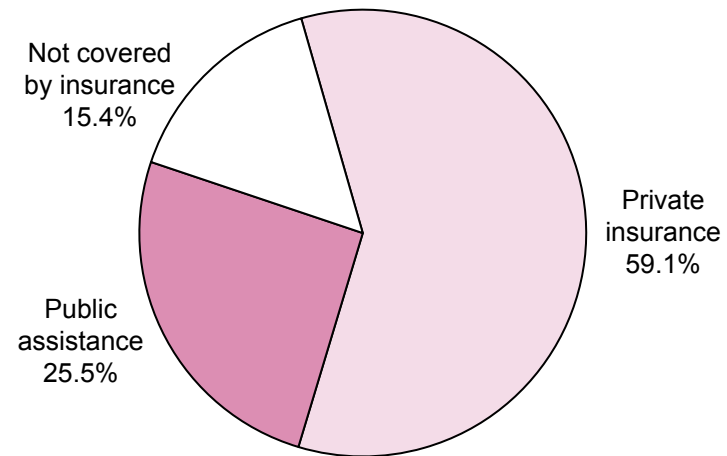
**Table 17: Distribution of Patient Insurance Coverage in the Primary Private Practice of Pediatric Dentists and General Practitioners, by Employment Situation, 2011**

	<i>Insurance Coverage</i>		
	<i>Private Insurance</i>	<i>Public Assistance</i>	<i>Not covered by insurance</i>
<i>Pediatric Dentists<sup>1</sup></i>			
All owners	59.3%	25.3%	15.4%
Solo practitioners	58.8	26.2	15.0
Nonsolo owners	61.1	22.6	16.4
Employed	58.8	25.0	16.2
<b>All pediatric dentists</b>	59.1	25.5	15.4
<i>General Practitioners*</i>			
All owners	65.2	5.0	29.8
Solo practitioners	65.5	4.9	29.6
Nonsolo owners	63.2	5.7	31.2
Employed	67.5	9.9	22.6
<b>All general practitioners</b>	65.2	5.4	29.4

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

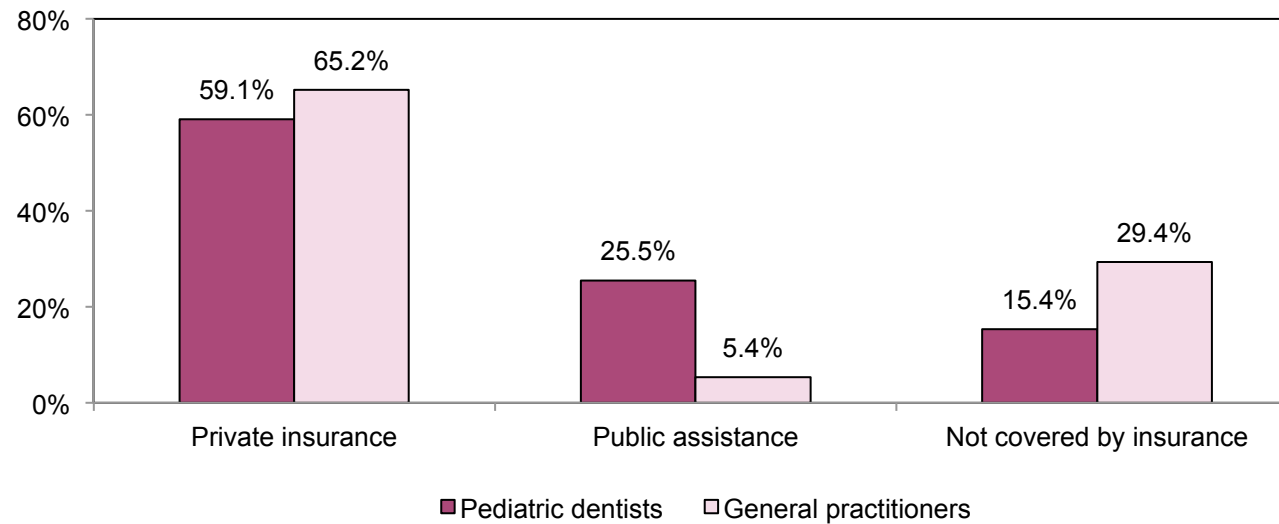
\* The percentages and averages in this group have been weighted by the inverse of the number of dentists in the practice. For more details regarding weights, please see page 31.

**Figure 4: Distribution of Patient Insurance Coverage in the Primary Private Practice of All Pediatric Dentists, 2011**



Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Figure 5: Distribution of Patient Insurance Coverage in the Primary Private Practice of Pediatric Dentists and General Practitioners, 2011**



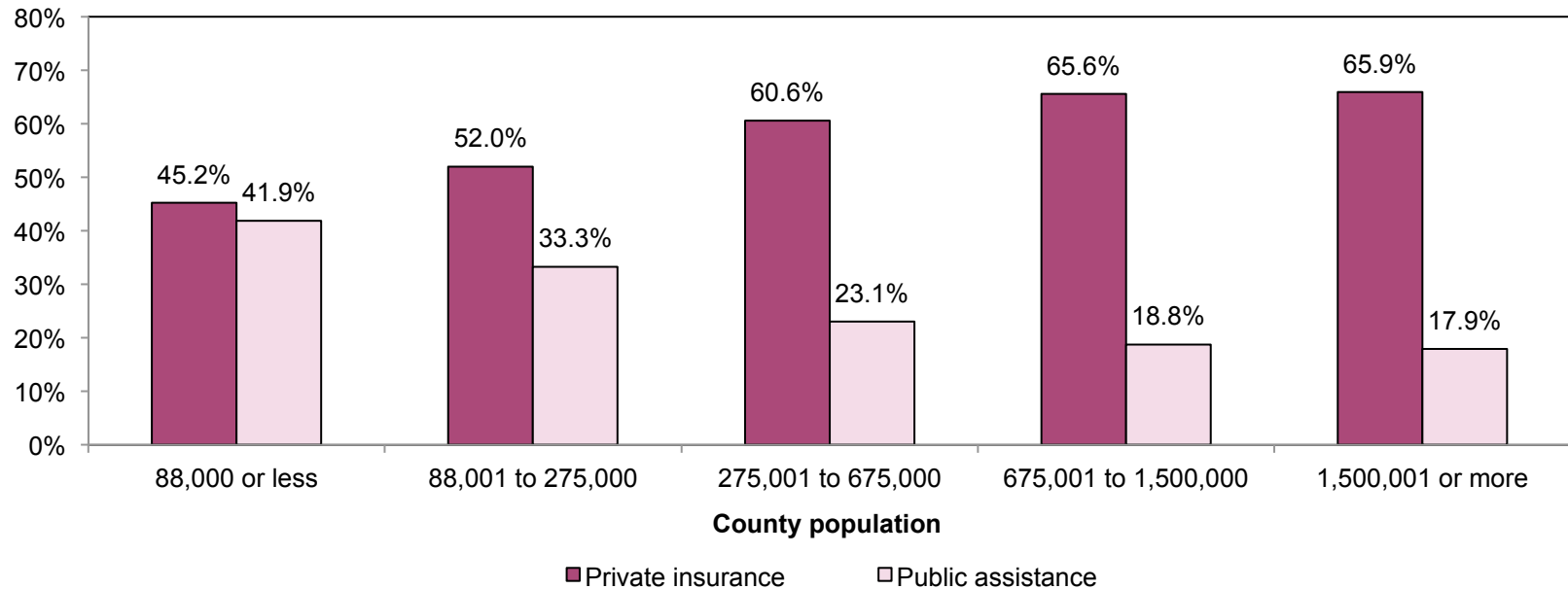
Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 18: Patient Insurance Coverage in the Primary Private Practice of Pediatric Dentists, by County Population, 2011**

<i>Pediatric Dentists*</i>	<i>Private insurance</i>	<i>Public assistance</i>	<i>Not covered by insurance</i>	<i>Total N</i>
88,000 or less	45.2%	41.9%	12.9%	48
88,001 to 275,000	52.0	33.3	14.8	145
275,001 to 675,000	60.6	23.1	16.2	158
675,001 to 1,500,000	65.6	18.8	15.6	155
1,500,001 or more	65.9	17.9	16.2	126
<b>All pediatric dentists</b>	<b>59.1</b>	<b>25.5</b>	<b>15.4</b>	<b>655</b>

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Figure 6: Percentage of Patients on Private Insurance and Public Assistance in the Primary Private Practice of Pediatric Dentists, by County Population, 2011**



Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

\* The percentages and averages in this group have been weighted by the inverse of the number of dentists in the practice. For more details regarding weights, please see page 31.

**Table 19: Percentage of Pediatric Dentists Who Had Patients Covered by Various Types of Insurance, by Employment Situation, 2011**

<i>Pediatric Dentists*</i>	<i>Private insurance</i>	<i>Public assistance</i>	<i>Not covered by insurance</i>
All owners	99.4%	68.6%	96.8%
Solo practitioners	99.3	67.3	96.4
Nonsolo owners	99.5	72.6	98.1
Employed	97.8	73.3	96.8
<b>All pediatric dentists</b>	99.3	69.1	96.6

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 20: Pediatric Dentists Treating and Accepting Medicaid- and CHIP-insured Patients, 2011**

<i>Pediatric Dentists*</i>	<i>Treat Medicaid-insured patients</i>	<i>Accept new Medicaid-insured patients</i>	<i>Treat CHIP-covered patients</i>	<i>Accept new CHIP-covered patients</i>
All owners	57.5%	50.4%	46.3%	44.2%
Solo practitioners	56.6	49.8	46.6	44.8
Nonsolo owners	60.3	52.0	45.2	42.4
Employed	64.0	61.8	50.0	49.6
<b>All pediatric dentists</b>	58.0	51.3	46.7	44.8

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

\* The percentages and averages in this group have been weighted by the inverse of the number of dentists in the practice. For more details regarding weights, please see page 31.

**Table 21: Primary Practice's Definition of Active Patient among Pediatric Dentists, 2011**

<i>Pediatric Dentists*</i>	<i>Patients treated within the last...</i>				
	<i>12 months</i>	<i>18 months</i>	<i>24 months</i>	<i>Does not define it</i>	<i>Other</i>
All owners	35.1%	25.0%	24.8%	12.6%	--**
Solo practitioners	34.3	24.0	26.0	12.8	--
Nonsolo owners	37.5	28.0	21.4	12.1	--
Employed	40.9	--	--	--	--
<b>All pediatric dentists</b>	35.4	24.2	24.4	13.6	--

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 22: Number of Active Patients on Record in the Primary Practice of Pediatric Dentists, 2011**

<i>Pediatric Dentists*</i>	<i>Mean</i>	<i>1<sup>st</sup> Q</i>	<i>Median</i>	<i>3<sup>rd</sup> Q</i>	<i>S.D.</i>	<i>N</i>
All owners	3,360	2,000	3,000	4,200	2,320	458
Solo practitioners	2,850	1,900	2,530	3,900	1,450	240
Nonsolo owners	4,850	2,500	4,000	6,000	3,460	218
Employed	4,290	2,200	3,800	6,380	2,610	35
<b>All pediatric dentists</b>	3,390	2,000	3,000	4,200	2,340	498

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 23: Patient Wait for Scheduled Appointments and After Arriving among Pediatric Dentists, by Employment Situation, 2011**

	<i>For Initial Appointment (Days)</i>		<i>After Arrival (Minutes)</i>	
	<i>Patient of Record</i>	<i>New Patient</i>	<i>Patient of Record</i>	<i>New Patient</i>
<i>Pediatric Dentists*</i>				
All owners	8.2	10.1	7.8	8.6
Solo practitioners	8.2	10.3	7.7	8.5
Nonsolo owners	8.0	9.3	8.2	8.7
Employed	8.3	10.9	6.2	7.1
<b>All pediatric dentists</b>	8.2	10.1	7.8	8.5

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

\* The percentages and averages in this group have been weighted by the inverse of the number of dentists in the practice. For more details regarding weights, please see page 31.

\*\* This category had too few responses to allow for reliable statistical analysis.

**Table 24: Number of Patient Visits per Pediatric Dentist per Hour, Week, and Year Including Dental Hygienist Appointments, by Employment Situation, 2011**

	<i>Patient visits per pediatric dentist per hour</i>			<i>Patient visits per pediatric dentist per week</i>			<i>Patient visits per pediatric dentist per year</i>		
<i>Pediatric Dentists</i>	<i>Walk-in/ Emer- gency</i>	<i>Sched- uled</i>	<i>Total</i>	<i>Walk-in/ Emer- gency</i>	<i>Sched- uled</i>	<i>Total</i>	<i>Walk-in/ Emer- gency</i>	<i>Sched- uled</i>	<i>Total</i>
All owners	0.2	3.6	3.8	5.4	110.4	115.2	259.0	5,260.0	5,490.1
Solo practitioners	0.2	3.8	3.9	5.2	117.4	122.1	252.3	5,596.9	5,827.4
Nonsolo owners	0.2	3.5	3.6	5.6	102.8	107.6	266.8	4,892.8	5,122.4
Employed	0.2	2.4	2.6	5.7	68.8	74.5	256.4	3,055.6	3,312.0
<b>All pediatric dentists</b>	0.2	3.4	3.6	5.4	104.0	108.9	257.1	4,932.7	5,164.7

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 25: Number of Patient Visits per Pediatric Dentist per Hour, Week, and Year Excluding Dental Hygienist Appointments, by Employment Situation, 2011**

	<i>Patient visits per pediatric dentist per hour</i>			<i>Patient visits per pediatric dentist per week</i>			<i>Patient visits per pediatric dentist per year</i>		
<i>Pediatric Dentists</i>	<i>Walk-in/ Emer- gency</i>	<i>Sched- uled</i>	<i>Total</i>	<i>Walk-in/ Emer- gency</i>	<i>Sched- uled</i>	<i>Total</i>	<i>Walk-in/ Emer- gency</i>	<i>Sched- uled</i>	<i>Total</i>
All owners	0.2	2.8	3.0	5.4	89.1	94.5	259.0	4,212.4	4,468.6
Solo practitioners	0.2	2.8	3.0	5.2	89.7	94.9	252.3	4,226.7	4,476.0
Nonsolo owners	0.2	2.9	3.1	5.6	88.5	94.1	266.8	4,195.7	4,460.0
Employed	0.2	2.4	2.6	5.7	68.8	74.5	256.4	3,055.6	3,312.0
<b>All pediatric dentists</b>	0.2	2.8	3.0	5.4	85.5	90.8	257.1	4,017.7	4,271.9

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

## OPERATING ROOM USE

General anesthesia (GA) is a medical procedure that renders the patient unconscious allowing for the safe and humane provision of medical and dental diagnostic and surgically invasive procedures. Dental treatment under GA is an effective way to provide medically necessary care to those children who may be cognitively-immature, highly anxious or fearful, have special needs, or be medically-compromised and unable to receive treatment in a traditional office setting. Delivering dental treatment under GA can have significant positive effects on the quality of life for children and their families and can improve access to dental care. GA may be a medically necessary when treating some dental patients and, therefore, should be included as an essential health benefit under both public and private medical insurance coverage for children.

Much attention has recently focused on the use of GA to enable dentists to perform dental treatment, as illustrated by a 2012 article in the *New York Times*.<sup>7</sup> However, sedation and GA have been utilized in the practice of dentistry and medicine since the 1840s. Dentistry has continued to build upon this foundation and been instrumental in developing safe and effective sedative and anesthetic techniques that have enabled millions of people to gain access to dental care. The use of GA for dental care continues to have a remarkable record of safety.<sup>8</sup>

While most dental care is provided in a traditional office setting utilizing local anesthesia and, when indicated, a variety of adjunctive pharmacologic and behavioral guidance techniques, a subset of patients cannot benefit from routine approaches. The American Academy of Pediatric Dentistry recognizes that non-pharmacological behavior guidance techniques are not viable for some pediatric dental.<sup>9</sup> Some children and patients with special healthcare needs have treatment conditions, acute situational anxiety, uncooperative age-appropriate behavior, immature cognitive functioning, disabilities, or medical conditions that require deep sedation/GA to undergo dental procedures in a safe and humane fashion.<sup>10</sup> Included in this group are infants and children who have not yet developed the ability to comprehend the need for their treatment nor the effective and appropriate skills to cope with invasive and potentially uncomfortable and psychologically threatening procedures. For many of these patients, treatment under GA in a hospital, outpatient facility, dental office or clinic represents the optimum or only venue to deliver necessary oral healthcare.<sup>11</sup>

Although GA, on the surface, carries a higher cost than utilizing other pharmacologic methods of behavior guidance, it can lead to lower overall costs for extensive dental treatment. GA allows the clinician to perform all indicated extensive and complex procedures during one outpatient or inpatient visit with minimal discomfort to the child. When the records of patients who received dental and one other procedure under shared GA were reviewed, an estimated savings was identified due to the efficiency of combined care.<sup>12</sup>

It is the recommendation of the AAPD that state and federal (ERISA) regulations require that health care plans provide for reimbursement of medical expenses, including GA and hospital-related costs, when one or more of the following indications are present in the course of dental treatment:

1. Patients, including infants, exhibiting physical, intellectual, or medically-compromising conditions, for which dental treatment under local anesthesia, with or without additional adjunctive techniques and modalities, cannot be expected to provide a humane and successful result and which, under GA, can be expected to produce a superior result.
2. Patients demonstrating dental treatment needs for which local anesthesia is indicated, but is ineffective because of acute infection, anatomic variation or allergy.
3. An extremely uncooperative, fearful, anxious or uncommunicative patient with dental needs of such magnitude or clinically apparent and functionally threatening to the well-being of the individual that treatment should not be postponed or deferred and for whom lack of treatment can be expected to result in dental or oral pain, infection, loss of teeth or other increased oral or dental morbidity or mortality.
4. Patients who have sustained extensive oral-facial and/or dental trauma, for which treatment under local anesthesia would be ineffective or compromised.

Patients meeting one or more of these criteria should not be denied medical benefits to which they would otherwise be entitled.

Specific to the Affordable Care Act (ACA), for the protection of children who need this medically necessary mandated coverage, the following policy goals are essential:

For those states that currently have GA mandates, state health insurance exchanges should select benchmark medical plans in the small group market that must comply with this coverage.

For those states that do not have GA mandates as of December 31, 2011, state health insurance exchanges should only consider benchmark medical plans that include such coverage.

These practices should continue in 2016 and beyond.

**Table 26: Pediatric Dentists Using an Operating Room in a Hospital or Accredited Surgical Facility for Treatment of Inpatient and/or Outpatient Cases, 2011**

<i>Pediatric Dentists</i>	<i>Percentage Using an Operating Room</i>	<i>Average Number of Cases Treated in an Operating Room per Month in 2011</i>
All owners	60.1%	9.6
Solo practitioners	61.5	8.2
Nonsolo owners	58.6	11.1
Employees	56.7	7.0
<b>All pediatric dentists</b>	59.5	9.3

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 27: Reasons for Pediatric Dentists Not Using an Operating Room in a Hospital or Accredited Surgical Facility for Treatment of Inpatient and/or Outpatient Cases, 2011**

<i>Pediatric Dentists</i>	<i>Never have cases that require treatment in an operating room</i>	<i>Refer to another dentist</i>	<i>Do not qualify for, or choose not to, seek hospital privileges</i>	<i>My community's hospital/surgical facility does not allow dental cases</i>	<i>I have an anesthesiologist that provides services in my office</i>	<i>Other</i>
All owners	--*	44.7%	--	--	37.3%	--
Solo practitioners	--	44.5	--	--	35.3	--
Nonsolo owners	--	45.0	--	--	39.4	--
Employees	--	--	--	--	--	--
<b>All pediatric dentists</b>	--	46.0	--	--	34.3	--

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

\* This category had too few responses to allow for reliable statistical analysis.



## SPECIAL HEALTH CARE NEEDS

The AAPD defines special health care needs as “any physical, developmental, mental, sensory, behavioral, cognitive, or emotional impairment or limiting condition that requires medical management, health care intervention, and/or use of specialized services or programs. The condition may be congenital, developmental, or acquired through disease, trauma, or environmental cause and may impose limitations in performing daily self-maintenance activities or substantial limitations in a major life activity.”<sup>13</sup> Patients with special needs are at high risk for developing oral disease, and access to dental care has been recognized nationally as a major unmet health need for these groups. The US Surgeon General’s Report on Oral Health (2000) discussed the inequalities that affect vulnerable populations, such as people with disabilities and those who are medically compromised and elderly, concerning untreated dental disease, access to dental care and the use of preventive services. The ADA survey notes that an overwhelming majority of Pediatric Dentists provide care to patients with special health care needs (99.5%)(See Table 28). National studies have noted the percentage of general dentists who provide care the children with special health care needs (CSHCN) to be much lower at approximately 10%. Only 1 in 4 general dentists reported having hands-on experience with patients with special health care needs

in dental school.<sup>14</sup> Pediatric dentists have become the default caretakers of dental care for all patients with special health care needs.<sup>15</sup> This is in part to their extensive training in communication skills, behavior management, and experience in treating patients with uncontrolled movement. This is in addition to the fact that a high percentage of pediatric dentists treat patients with public insurance plans.

Over a third of families of children with special health care need report their insurance is inadequate.<sup>16</sup> While most CSHCN had health insurance prior to national health care reform, their coverage often was not adequate to meet their needs. Coverage for necessary diagnostic testing, specialty care, dental services, durable medical supplies, prescription drugs, physical, communication and occupational therapies, and supportive services are critical for CSHCN. The ACA creates some new benefit mandates that are important for CSHCN, especially for those with private coverage, specifically the Federal Standard for Essential Health Benefits which includes “Pediatric services, including oral and vision care”. Mental health, dental and habilitative services typically have not been standard benefits in private plans, so including these categories in the definition of essential benefits constitutes a significant paradigm shift that is particularly important for CSHCN.

**Table 28: Pediatric Dentists Providing Care to Any Patients with Special Health Care Needs in Their Primary Practice, 2011**

<i>Pediatric Dentists</i>	<i>Percent</i>	<i>N</i>
All owners	99.7%	627
Solo practitioners	99.7	330
Nonsolo owners	99.7	297
Employees	97.9	96
<b>All pediatric dentists</b>	<b>99.5</b>	<b>749</b>

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

## CHARITABLE CARE

Dentists both general and pediatric provide charitable dental care through a variety of ways. State dental associations often have programs called “Donated Dental Services (DDS)”, where they or their foundations employ a program coordinator who helps coordinate dental care for the most disadvantaged or disabled in that state. The dentists volunteering for DDS donate services in their own offices. Dental laboratories often also contribute services. According to the Dental Lifeline Network there are over 15,000 dentists and 3,000 laboratories participating across the

country. Since 1986, the Donated Dental Services (DDS) program reports over \$200 million in donated dental therapies, transforming the lives of 106,000 vulnerable people nationwide.<sup>17</sup> Approximately 75% of Pediatric Dentists report providing charitable dental care by offering reduced fees at an average of 25% in addition to providing free care at an estimate of \$12,990-\$23,840 annually (See Table 29 and Figure 7). Other charitable dental programs that pediatric dentists participate in are Give Kids a Smile Days and Mission of Mercy projects that occur across the nation on a regular basis.

**Table 29: Percentage of Pediatric Dentists Whose Primary Practice Provided Charitable Dental Care in 2011**

<i>Pediatric Dentists*</i>	<i>Percent Providing Charitable Dental Care</i>	<i>Average Estimated Total Dollar Value of Care Provided Free of Charge</i>	<i>Average Estimated Percentage Reduction Offered to Patients (Reduced Rate)</i>	<i>Average Estimated Total Billing Provided at a Reduced Rate</i>
All owners	74.8%	\$15,950	25.5%	\$ 70,410
Solo practitioners	74.1	12,990	25.6	49,170
Nonsolo owners	76.9	23,840	25.4	125,780
Employees	--**	--	--	--
<b>All pediatric dentists</b>	<b>73.6</b>	<b>15,700</b>	<b>25.3</b>	<b>70,320</b>

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 30: Charitable Care as a Percentage of Practice Gross Billings of Pediatric Dentists, 2011**

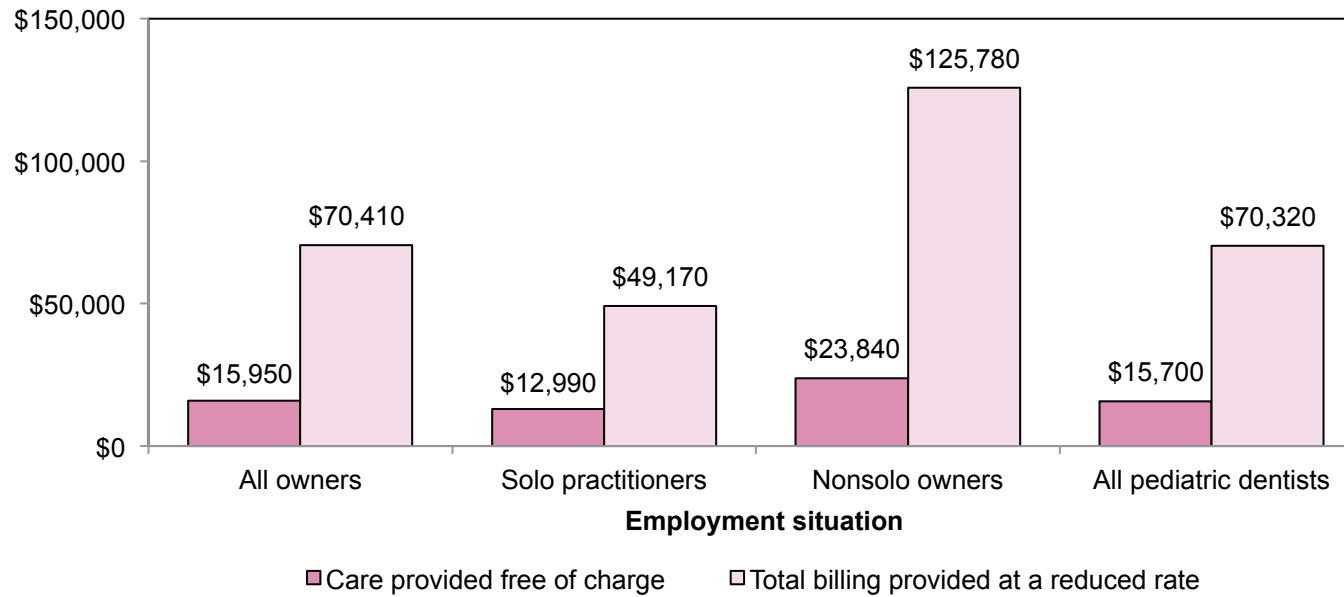
<i>Pediatric Dentists*</i>	<i>Average Value of Care Provided Free of Charge</i>	<i>Average Value of Care Provided at a Reduced Rate</i>	<i>Average Value of Care Provided Free of Charge or at a Reduced Rate</i>
All owners	1.3%	4.2%	5.5%
Solo practitioners	1.4	3.6	5.0
Nonsolo owners	1.2	5.6	6.8

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

\* The percentages and averages in this group have been weighted by the inverse of the number of dentists in the practice. For more details regarding weights, please see page 31.

\*\* This category had too few responses to allow for reliable statistical analysis.

**Figure 7: Pediatric Dentists' Dental Practices' Average Estimated Annual Value of Charitable Care, 2011**



Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**EMPLOYMENT OF DENTAL PRACTICE PERSONNEL BY PEDIATRIC DENTISTS**

## EMPLOYMENT OF DENTAL OFFICE PERSONNEL

Pediatric dental care delivery is more labor intensive than that of general practice and differs significantly in the duties and responsibilities of those employed. Pediatric dentists report greater than 35% more full and part time auxiliary personnel per dentist (6.0 to 4.4 respectively) than their general dental counterparts, which many believe contributes to greater overall delivery efficiency. At the chair the difference is even more striking. While pediatric dentists and general dentists both report almost universal employment of chairside assistants (97.9% and 94.7% respectively), pediatric providers utilize almost 70% more full and part-time chairside assistants per dentist than their general counterparts (2.7 to 1.6 respectively). Willingness to expand delivery capacity through greater employment and utilization of dental assistants, and an expanded scope of function for these auxiliary personnel taking place in many states, will enable pediatric dentists to expand access to oral health services for children obtaining benefit coverage under the Affordable Care Act.

In the business office, the numbers are equally telling. While only 13.8% of general dentists utilize a financial coordinator separate from a secretary/receptionist to handle financial arrangements, 25.5% of pediatric dentists report doing so. The number of general practitioners employing an office manager (31.6%) is, likewise, less than that reported by pediatric dentists (46.5%). These figures suggest pediatric dentists operate in a more complex business environment than that of the general dental practice and, for practice owners, must master a greater degree of administrative skills.

Another finding indicating a high rate of delivery efficiency is that over 15% of pediatric dentists report employing a separate sterilization assistant in their practices, a position reported by less than 7% of general dentists.

Lastly, while dental hygienists typically work in the practices of general practitioners (75.9% report employing hygienists), 54.6% of pediatric dentists report employment of a hygienist in their offices (a figure which rises to 65.7% of non-solo practice owners). Clearly, pediatric dentists are finding meaningful responsibilities for dental hygienists in pediatric dental practice.

These personnel offer the opportunity for case management for families which is important in the context of Medicaid expansion and patients who have social issues that need to be addressed in order for them to receive dental care. Dental case management has been linked to positive oral health outcomes in the Medicaid population. A recent study employing a dental case manager in New York State to recruit dental offices to accept Medicaid and CHIP patients and to provide comprehensive case management services to Medicaid recipients found case management to be effective. Results included an increase Medicaid beneficiaries' use of services and an increase in oral health literacy and treatment compliance. The intervention was also successful in increasing dentists' participation in Medicaid and minimizing administrative burdens related to Medicaid participation.<sup>18</sup>

**Table 31: Percentage of Pediatric Dentists Employing Non-Dentist Staff by Position, 2011\***

<i>Pediatric Dentists</i>	<i>Dental Hygienists</i>	<i>Chairside Assistants</i>	<i>Secretaries/ Receptionists</i>	<i>Dental Laboratory Technicians</i>	<i>Financial Coordinators (Business Personnel)</i>	<i>Office Managers</i>	<i>Sterilization Assistants</i>
All owners	53.8%	97.7%	95.0%	--**	24.7%	44.6%	15.0%
Solo practitioners	49.8	97.5	94.0	--	20.8	38.8	10.7
Nonsolo owners	65.7	98.5	97.8	--	36.1	61.9	27.7
<b>All pediatric dentists</b>	54.6	97.9	95.3	3.3%	25.5	46.5	16.1

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 32: Average Number of Non-Dentist Staff per Pediatric Dentist in the Primary Private Practice, 2011\***

<i>Pediatric Dentists</i>	<i>Full-Time Staff</i>	<i>Part-Time Staff</i>	<i>Full- and Part-Time Staff</i>	<i>N</i>
All owners	4.4	1.7	6.2	600
Solo practitioners	4.7	1.9	6.6	318
Nonsolo owners	3.8	1.2	5.0	282
<b>All pediatric dentists</b>	4.4	1.7	6.0	700

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

\* The percentages and averages in this group have been weighted by the inverse of the number of dentists in the practice. For more details regarding weights, please see page 31.

\*\* This category had too few responses to allow for reliable statistical analysis.

**Table 33: Average Number of Dental Hygienists per Pediatric Dentist in the Primary Private Practice  
(among Those Pediatric Dentists Employing Dental Hygienists), 2011\***

<i>Pediatric Dentists</i>	<i>Full-Time Staff</i>	<i>Part-Time Staff</i>	<i>Full- and Part-Time Staff</i>	<i>N</i>
All owners	0.9	1.0	1.9	351
Solo practitioners	1.0	1.2	2.2	158
Nonsolo owners	0.6	0.7	1.3	193
<b>All pediatric dentists</b>	<b>0.8</b>	<b>1.0</b>	<b>1.8</b>	<b>419</b>

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 34: Average Number of Chairside Assistants per Dentist in the Primary Private Practice  
(among Those Pediatric Dentists Employing Chairside Assistants), 2011\***

<i>Pediatric Dentists</i>	<i>Full-Time Staff</i>	<i>Part-Time Staff</i>	<i>Full- and Part-Time Staff</i>	<i>N</i>
All owners	2.1	0.7	2.8	586
Solo practitioners	2.2	0.7	3.0	309
Nonsolo owners	1.7	0.4	2.2	277
<b>All pediatric dentists</b>	<b>2.1</b>	<b>0.6</b>	<b>2.7</b>	<b>684</b>

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

**Table 35: Average Number of Secretaries/Receptionists-Patient Scheduling Coordinators per Dentist in the Primary Private Practice  
(among Those Pediatric Dentists Employing Secretaries/Receptionists-Patient Scheduling Coordinators), 2011\***

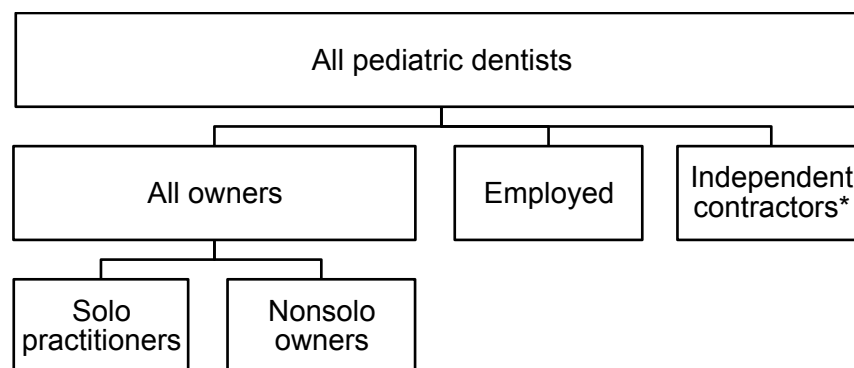
<i>Pediatric Dentists</i>	<i>Full-Time Staff</i>	<i>Part-Time Staff</i>	<i>Full- and Part-Time Staff</i>	<i>N</i>
All owners	1.4	0.4	1.8	575
Solo practitioners	1.5	0.5	1.9	298
Nonsolo owners	1.1	0.2	1.3	277
<b>All pediatric dentists</b>	<b>1.4</b>	<b>0.4</b>	<b>1.7</b>	<b>672</b>

Source: American Dental Association, Health Policy Resources Center, 2012 *Survey of Dental Practice*.

\* The averages in this group have been weighted by the inverse of the number of dentists in the practice. For more details regarding weights, please see page 31.

## Employment Situation of Dentists

Tables in this report frequently group results by the employment situation of dentists. The hierarchy of employment situations used in this report is:



Comparison of “employment situation” categories used in this report:

Category	(Survey question 1) Primary occupation is private practice (full- or part-time)	(Survey question 3) Specialty area	(Survey question 5b) Employment situation in 2011	(Survey question 14) Number of dentists in practice
<b>All owners</b>	Yes	Pediatric dentistry	Sole proprietor <i>or</i> partner	Any
<b>Solo practitioners</b>	Yes	Pediatric dentistry	Sole proprietor (i.e., the only owner)	One
<b>Nonsolo owners</b>	Yes	Pediatric dentistry	Partner (i.e., one of two or more owners)	Two or more
<b>Employed</b>	Yes	Pediatric dentistry	Employee (on a salary, commission, percentage, or associate basis)	Any
<b>All pediatric dentists</b>	Yes	Pediatric dentistry	Sole proprietor <i>or</i> partner <i>or</i> employee <i>or</i> independent contractor	Any

\* Independent contractors comprised 2.9% of all dentists whose primary occupation was private practice according to the ADA Health Policy Resources Center's 2009 *Distribution of Dentists* report. This category typically had too few responses to allow for reliable statistical analysis in this report's tables.



## Survey Methodology

The 2012 *Survey of Dental Practice* was sent to a randomly selected group of dentists in private practice. The sample included general practitioners and specialists, as well as members and nonmembers of the ADA.

### Sampling

Samples for the *Survey of Dental Practice* are drawn from the ADA Sampling Frame which includes the names of all active private practitioners who graduated from an accredited dental school in the United States. Each year the Sampling Frame is updated with information from the *Distribution of Dentists* and the *Survey of Dental Graduates*, both of which are conducted on an annual basis. Current information is also gathered from the ADA's Master File.

The 2012 *Survey of Dental Practice*'s regular sample was taken from the General Practitioner Sampling Frame and the Specialist Sampling Frame. The sample included 7,969 general practitioners and 5,313 specialists whose primary or secondary occupation was identified as private practice. The percentage of specialists in the sample exceeds the percentage of specialists in the dental population as specialists were oversampled to ensure an adequate number of responses for statistical analysis.

An additional sample of 3,308 was drawn for pediatric dentists. They were sent the same survey and their data were collected using the same methodology as the regular sample.

### Data Collection

Data collection for the 2012 *Survey of Dental Practice* began in April 2012. One follow-up mailing of the full version of the questionnaire was sent to non-respondents in May. Data collection was completed in July 2012.

The sample was adjusted by removing dentists who were retired, deceased, not in private practice, or not locatable, resulting in 2,584 respondents and a final adjusted overall response rate of 16.5%.

With respect to pediatric dentists, the complete sample contained 4,123 pediatric dentists and yielded 781 respondents, or 18.9% of the sample.

## Weighting the Sample

For some variables related to the size of the practice, responses were weighted by the inverse of the number of dentists in the practice. For example, in practices with two dentists, the weight was  $\frac{1}{2}$  or 0.5. In practices with only one dentist, the weight was 1/1 or 1. As such, the number of dentists weight had no impact on the responses of solo dentists. Statistics computed with weights are indicated as such in all reports.

## Glossary

Definitions of several terms and phrases are provided in this section to assist with the interpretation of data contained in the tables. The dentists included in this report were working in private practice as a primary occupation. In addition, all dentists had started in their current practice prior to 2011.

**ACTIVE PRIVATE PRACTITIONERS** Dentists engaged in the private practice of dentistry (full- or part-time) as either a primary or secondary occupation. Active private practitioners are one type of professionally active dentists.

**EMPLOYED DENTIST** A dentist employed in either an incorporated or unincorporated dental practice on a salary, commission, percentage, or associate basis and who does not share in the ownership of the practice in any way. Employed dentists are one type of nonowner dentists along with independent contractors.

**INDEPENDENT CONTRACTOR** A dentist who contracts with the owner dentist(s) of a practice for the use of space and equipment. Independent contractors derive their income from the fees charged to their own patients and do not receive any financial compensation from the owner(s) of the practice. Independent contractors are one type of nonowner dentist along with employed dentists.

**INDEPENDENT DENTIST** A sole proprietor or partner who owns or shares in the ownership of an incorporated or unincorporated dental practice. Sole proprietors or partners in incorporated practices are also referred to as shareholders. There are two types of independent dentists: solo dentists and independent nonsolo dentists.

**MEAN** The arithmetic average calculated by adding all responses together and then dividing by the number of respondents.

## MEDIAN

A statistical measure that divides ranked numeric responses into halves. The median is the response which falls at the fifty percent mark. The responses in one half are all smaller than the median and those in the other half are all larger than the median.

## NONOWNER DENTIST

A dentist who does not share in the ownership of the practice in which he or she works. There are two types of nonowner dentists: employed dentists and independent contractors.

## PROFESSIONALLY ACTIVE DENTIST

A dentist whose primary and/or secondary occupation is private practice (full- or part-time); dental school faculty or staff; military dentist; government-employed dentist at the federal, state, or local levels; hospital staff dentist; graduate student, intern or resident; or other health or dental organization staff member.

## QUARTILES

A statistical measure that divides ranked number responses into four equal quarters. The 1<sup>st</sup> quartile is the response that falls at the twenty-five percent mark and divides the responses into two unequal groups. One group contains one-fourth of the responses and the other three-fourths of the responses. The responses in the smaller group are all smaller than the 1<sup>st</sup> quartile and those in the larger group are all larger than the 1<sup>st</sup> quartile.

The 2<sup>nd</sup> quartile is the response that falls at the fifty- percent mark and divides the responses into two equal groups. The responses in one half are all smaller than the 2<sup>nd</sup> quartile and those in the other half are all larger than the 2<sup>nd</sup> quartile. The 2<sup>nd</sup> quartile is also known as the median.

The 3<sup>rd</sup> quartile is the response that falls at the seventy-five percent mark and divides the responses into two unequal groups. One group contains three-fourth of the responses and the other one-fourth of the responses. The responses in the larger group are all smaller than the 3<sup>rd</sup>

quartile and those in the smaller group are all larger than the 3<sup>rd</sup> quartile.

## **PRACTITIONER)**

dentists and who owns the practice. Solo dentists are one type of independent dentists along with independent nonsolo dentists.

## **STANDARD DEVIATION (S.D.)**

The typical deviation of sample values from the mean. The size of the standard deviation reflects the accuracy of the sample mean in representing the population. In a normal population, 68.0% of the observations fall within one standard deviation of the mean, 95.5% within two standard deviations, and 99.7% within three standard deviations.

## **REGIONS**

### ***Four U.S. Census Regions:***

- Northeast: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, and Pennsylvania
- Midwest: Illinois, Indiana, Michigan, Ohio, Wisconsin, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.
- South: Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, Washington D.C., West Virginia, Alabama, Kentucky, Mississippi, Tennessee, Arkansas, Louisiana, Oklahoma, and Texas.
- West: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming, Alaska, California, Hawaii, Oregon, and Washington.

## **SHAREHOLDER**

An owner dentist, sole proprietor or partner, in an incorporated practice.

## **SOLE PROPRIETOR**

A single owner of an incorporated or unincorporated dental practice. In incorporated practices, a sole proprietor is also referred to as the "sole shareholder." Sole proprietors may or may not have nonowner dentists working at their practices. A sole proprietor who is the only dentist working in the practice is a solo dentist. A sole proprietor with nonowner dentists working in his or her practice is an independent nonsolo dentist.

## **SOLO DENTIST (SOLO**

A dentist who works in an incorporated or unincorporated dental practice with no other

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- <sup>3</sup> Valachovic, R. Dental Workforce Trends and Children. Ambulatory Pediatrics. 2002 Mar-Apr; 2(2): 154–161.
- <sup>4</sup> Department of Health and Human Services, Centers for Medicare and Medicaid Services. Guide to Children's Dental Care in Medicaid. 2004 <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Downloads/Child-Dental-Guide.pdf>
- <sup>5</sup> Kerins C, Casamassimo PS, Ciesla D, Lee Y, Seale NS. A preliminary analysis of the US dental health care system's capacity to treat children with special health care needs. Pediatr Dent. 2011 Mar-Apr; 33(2):107-12.
- <sup>6</sup> [http://www.cdhp.org/press\\_release/house\\_passes\\_historic\\_health\\_care\\_package\\_0](http://www.cdhp.org/press_release/house_passes_historic_health_care_package_0) (Mar 22, 2010)
- <sup>7</sup> St. Louis, C. Preschoolers in surgery for a mouthful of cavities. New York Times. Published: March 6, 2012.
- <sup>8</sup> American Dental Association Policy Statement: The use of conscious sedation, deep sedation and general anesthesia in dentistry. As adopted by the October 2007 ADA House of Delegates.
- <sup>9</sup> American Academy of Pediatric Dentistry. Guideline on behavior guidance for the pediatric dental patient. Pediatr Dent 2008;30(suppl):125-33.
- <sup>10</sup> American Academy of Pediatric Dentistry. Guideline on use of anesthesia personnel in the administration of office-based deep sedation/general anesthesia to the pediatric dental patient. Adopted 2001, Revised, 2005, 2007, 2009.
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- <sup>12</sup> Stapleton, M, Sheller, B, Williams, B & Mancl, L. Combining procedures under general anesthesia. Pediatr Dent 2007 29(5): 397-402.
- <sup>13</sup> American Academy of Pediatric Dentistry. Guideline on Management of Dental Patients with Special Health Care Needs. Pediatr Dent 2012;34(6):152-7.
- <sup>14</sup> Casamassimo PS, Seale NS, Ruehs K. General dentists' perceptions of educational and treatment issues affecting access to care for children with special health care needs. J Dent Educ 2004;68(1):23-8.
- <sup>15</sup> Casamassimo PS. Pediatric Oral Health Interfaces Background Paper: Children with Special Health Care Needs: Patient, Professional, and System Issues. [http://www.astdd.org/docs/CSHCN\\_systemds\\_issues\\_backgroundCassa massimo.pdf](http://www.astdd.org/docs/CSHCN_systemds_issues_backgroundCassa massimo.pdf). (Accessed Nov 28, 2012)
- <sup>16</sup> National Survey of Children with Special Health Care Needs. [www.cshcndata.org](http://www.cshcndata.org). (Accessed Nov 28, 2012)
- <sup>17</sup> Dental Lifeline Network. <http://www.nfdh.org/images/stories/pdf/annual%20report2011.pdf>. (Accessed Dec 1, 2012)
- <sup>18</sup> Greenberg, B., Kumar, J., and Stevenson, H. Dental case management: Increasing access to oral health care for families and children with low incomes. JADA 2008;139(8):1114-1121.