# The First Dental Visit in Children with Special Health Care Needs

Amanda Collie, DDS; Jayakumar Jayaraman, BDS, MDS, FDSRCS, MS, PhD; Caroline Carrico, PhD; Elizabeth Bortell, DDS Department of Pediatric Dentistry, Virginia Commonwealth University ebbortell@vcu.edu

#### Purpose

- The aim of this project was to evaluate the average age and primary reason for the first dental visit among children with special health care needs (CSHCN) as well as to examine socioeconomic factors and other barriers related to CSHCN accessing care.
- There have been several studies that have surveyed parents/guardians of healthy children and there is a consensus that the majority of children did not have their first dental appointment by their first birthday.

# Background

- The American Academy of Pediatric Dentistry defines a special health care need (SHCN) as any physical, developmental, mental, sensory, behavioral, cognitive, emotional impairment, or limiting condition which requires medical management, health care intervention, and/or use of specialized services.
- Oral health conditions and diseases that are commonly associated with CSHCN include: buildup of calculus leading to increased risk of gingivitis and periodontal disease, enamel hypoplasia, dental caries, oral aversions and behavior problems, dental crowding, malocclusion, anomalies in tooth development and arch formation, bruxism and wear facets, fracture of teeth, and trauma.
- CSHCN face many challenges in receiving dental care and treatment. Five Barriers that CSHCN face with obtaining dental care include:
  1) the primary medical system; 2) parents of the child; 3) the child; 4) the dentist; and 5) payment for care.

## Methods

#### **Cross-Sectional Study**

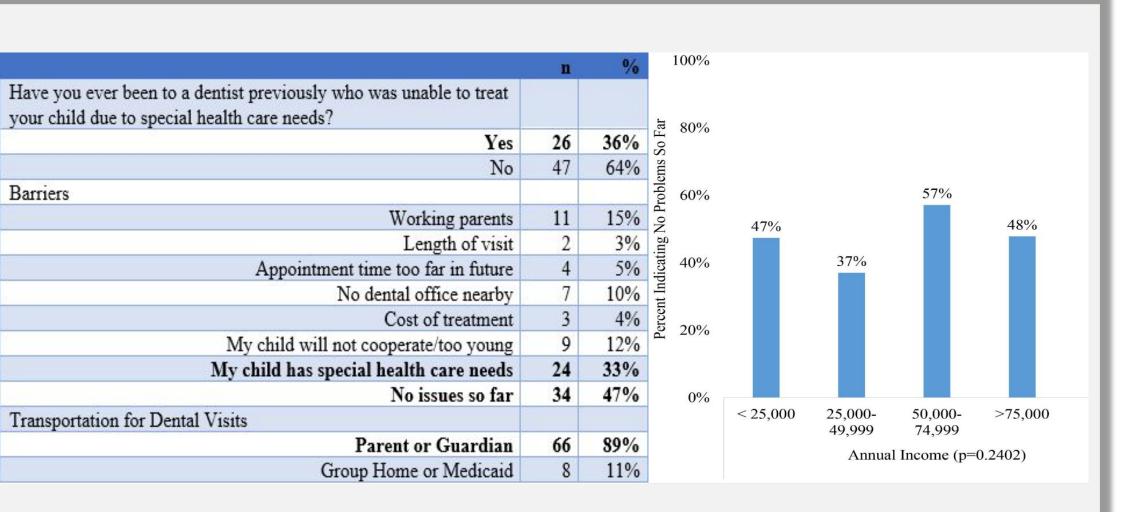
- This study was granted exempt status from the Virginia Commonwealth University (VCU) Institutional Review Board HM 20023973.
- This was a cross-sectional study that was conducted at the Children's Pavilion Dental Clinic and Brook Road Dental Clinic at Children's Hospital of Richmond at VCU.
- Study data was collected using REDCap.

- The survey had 22 questions and was only formatted in English.
- The survey targeted caregiver demographics, patient demographics, questions centered around the first dental visit, and overall oral health care knowledge of the caregiver.
- Recruitment occurred during a 6 month time frame to avoid recruiting the same subjects for their 6 month follow-up.
- Responses were summarized using counts and percentages.
- Associations with the child's first dental visit were assessed using chi-squared or Fisher's exact tests and significance was set at 0.05.

Results					
			Before 3	After 3	
		Type of Provider for First Visit	Delvice		
10	120/	Pediatric Dentist	58,95%	9, 64%	Γ
15 · 7		General Dentist	3, 5%	4, 29%	
51	68%	Other	0,0%	1,7%	
9	12%	Reason for First Visit			
5	7%	Exam and Cleaning/Routine Check up	49, 80%	15, 94%	
			12, 20%	1, 6%	
67	89%				
7	9%		31, 53%	10, 63%	
1	1%		40.000/	7.000	
	170		-	-	-
63	020/		40, 0870	7, 30%	-
10.00			21 35%	6 40%	t
4	5%			-	٢
1	1%				F
1	1%		-		F
7	9%	Parent/Guardian's frequency of dental			
			41, 69%	14, 88%	F
26	36%	Once a year	10, 17%	1,6%	
		When I have a problem	8, 14%	1,6%	Г
		Transportation for Dental Visits			
33		Parent or Guardian	53, 91%	13, 81%	Γ
6	8%	Group Home or Medicaid	5,9%	3, 19%	
	n 10 51 9 5 67 7 1 1 62 4 1 1 7 26 7 26 7 33	n     %       10     13%       51     68%       9     12%       5     7%       67     89%       7     9%       1     1%       62     83%       4     5%       1     1%       7     9%       3     46%	Type of Provider for First Visit1013%5168%912%57%6789%79%11%6283%45%11%79%11%6283%45%11%79%11%79%710%3346%45%710%3346%	n     %       10     13%       51     68%       9     12%       5     7%       67     89%       1     1%       7     9%       1     1%       62     83%       4     5%       1     1%       7     9%       1     1%       7     9%       1     1%       62     83%       4     5%       1     1%       7     9%       1     1%       7     9%       1     1%       62     83%       4     5%       1     1%       7     9%       1     1%       7     9%       62     83%       63     64%       7     9%       1     1%       7     9%       26     36% </td <td>n     %     Before 3     After 3       10     13%     Type of Provider for First Visit     10       10     13%     Pediatric Dentist     58,95%     9,64%       51     68%     General Dentist     3,5%     4,29%       9     12%     Reason for First Visit     10     17%       5     7%     Problem (Caries, Pain, Trauma, gtc)     12,20%     1,6%       Who Referred you for First Visit?     Provider (Pediatrician or Specialist)     27,47%     6,38%       7     9%     I was not referred/self-referred     31,53%     10,63%       Experienced Failed Visit     Yes     19,32%     7,50%       62     83%     When should the first visit be?     When should the first visit be?     When should the first visit be?       1     1%     Years of older     1,2%     5,33%       7     9%     Syears or older     1,2%     5,33%       7     9%     Syears or older     1,2%     5,33%       7     9%     Syears or older     1,2%     5,33%       P</td>	n     %     Before 3     After 3       10     13%     Type of Provider for First Visit     10       10     13%     Pediatric Dentist     58,95%     9,64%       51     68%     General Dentist     3,5%     4,29%       9     12%     Reason for First Visit     10     17%       5     7%     Problem (Caries, Pain, Trauma, gtc)     12,20%     1,6%       Who Referred you for First Visit?     Provider (Pediatrician or Specialist)     27,47%     6,38%       7     9%     I was not referred/self-referred     31,53%     10,63%       Experienced Failed Visit     Yes     19,32%     7,50%       62     83%     When should the first visit be?     When should the first visit be?     When should the first visit be?       1     1%     Years of older     1,2%     5,33%       7     9%     Syears or older     1,2%     5,33%       7     9%     Syears or older     1,2%     5,33%       7     9%     Syears or older     1,2%     5,33%       P

- A total of 77 caregivers participated in the survey.
- The majority of caregivers reported a low-income and level of education; however, they reported seeing their own dentist routinely every 6 months.
- Most of the patients were seen before age 3, and the main reason for their first dental visit was for a routine cleaning and exam.
- Autism Spectrum Disorder and intellectual disabilities made up the majority of the sample population.
- Whether or not a child was seen by a dentist by the age of 3 was significantly associated with the type of provider they saw for their first visit, such as a pediatric dentist (p=0.0046), whether or not they experienced a failed dental visit (p=0.0185), and their belief regarding when the first visit should be (p=0.0004).





• When asked about potential barriers to having their child treated, 33% indicated their child's special health care needs, 15% indicated the parents' working schedules, and 10% reported the lack of a dental office nearby. Almost half reported they have not experienced any barriers so far (47%).

• Caregivers reporting higher annual incomes also appeared to report they had no barriers to care in scheduling their child's first dental appointment.

• Dental appointments for CSHCN often require a private room, additional team members, and a longer period of time spent with the dentist. For many general dental practitioners, they may not have the staff or space to accommodate CSHCN. Due to these challenges, many pediatric dentists continue to provide care to CSHCN through adolescence and young adulthood.

### Conclusion

• As the number and prevalence of CSHCN increases, it is vital to continue to educate caregivers on the importance of routine examinations as well as support general dentists and other health care providers in their role of caring for patients with SHCN. Patients with SHCN will continue to face unmet dental needs if barriers to care are not overcome. Decreasing financial, geographical, and social barriers as well as providing a coordinated transition from the pediatric dentist to the adult dentist are critical factors for improving the oral health of CSHCN.

References available upon request