

Special Needs Patients' Ability to Obtain Dental Services and Willingness of Dentists to Treat Them

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National Oral Health Conference, June 5, 2020

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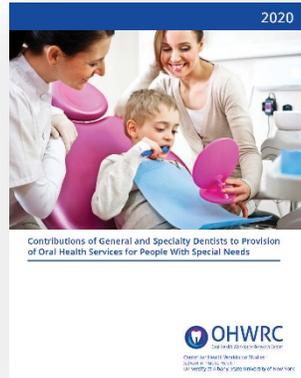


The Oral Health Workforce Research Center

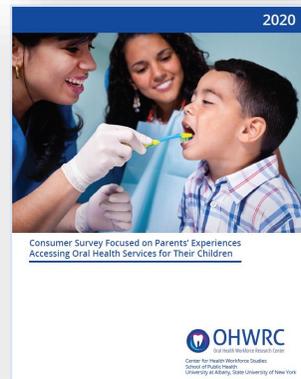
- A cooperative agreement between the Center for Health Workforce Studies (CHWS) and the Health Resources and Services Administration (HRSA)
- Created as a partnership between CHWS and the University of California, San Francisco in 2014
- Supports workforce research aimed at expanding access to oral health services for vulnerable populations
 - An available, competent, and well distributed workforce is required to meet unmet need for oral health services
 - The research conducted by the OHWRC is designed to inform workforce planning for the delivery of oral health services

Special Needs Patients' Ability to Obtain Dental Services and Willingness of Dentists to Treat Them

This presentation is based on two research studies conducted by the OHWRC:



[Contributions of General and Specialty Dentists to the Provisions of Oral Health Services for People with Special Health Care Needs](#)

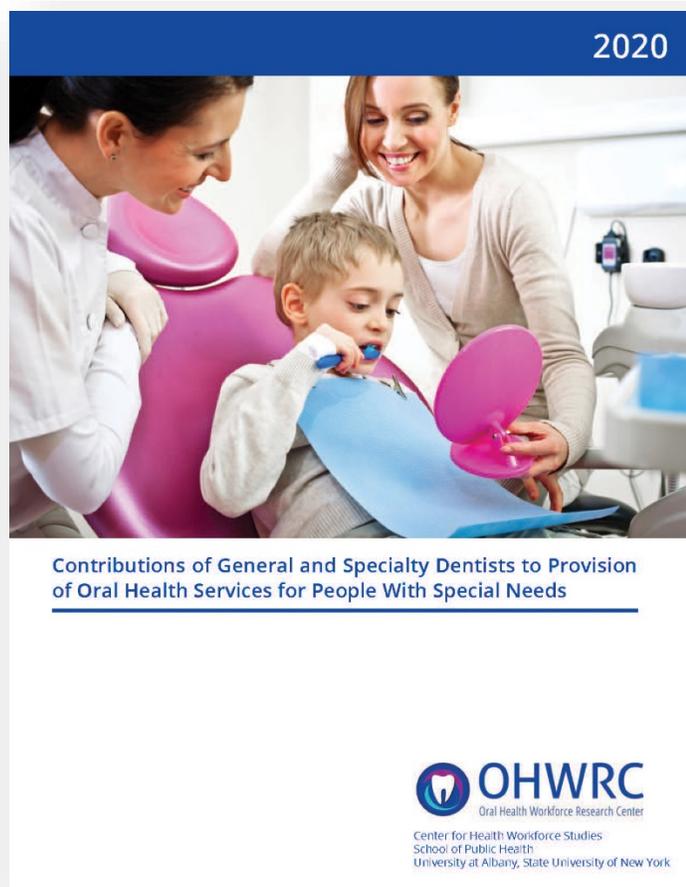


[Parental Perspectives on Access to Oral Health Care for Children with Special Needs](#)

Acknowledgements

- This work is supported by the Health Resources and Services Administration (HRSA) of the US Department of Health and Human Services (HHS) as part of an award totaling \$449,821. The contents are those of the authors and do not necessarily represent the official views of, nor an endorsement by, HRSA, HHS, or the US Government
- The authors wish to acknowledge the contributions of the Health Policy Institute at the American Dental Association and its staff, particularly, Marko Vujicic, Adriana Menezes and Rebecca Starkel, to the survey of dentists on care to people with special needs
- The authors also wish to acknowledge the contributions of the Association of American Medical Colleges (AAMC) and its staff, especially Michael Dill, Director of Workforce Studies, and Karen Jones, Senior Data Analyst, for their input on design and conduct of their consumer survey
- The authors have no conflicts of interest to report

Survey Methodology & Sample Characteristics



Chelsea Fosse, DMD, MPH

Patients with Special Needs

For the purposes of this survey, patients with special needs were defined as those presenting with one or more of the following:

1. **Intellectual and/or developmental disabilities** (e.g., those with autism spectrum disorder, seizure disorders, cerebral palsy, genetic conditions like Down syndrome, etc.)
2. **Physical disabilities** (e.g., mobility or movement disorders such as those requiring the use of a wheelchair, involuntary or uncontrollable movements)
3. **Other acquired disabilities** (e.g., those with dementia, traumatic brain injury, or other type of injury or condition)

Sampling Strategy & Response Rates

Survey Sample	n	# Responses	Response Rate
Random Sample			
ADA general and pediatric dentists	18,521	623	3.4%
Convenience Sample			
Special Care Dentistry Association	350	130	37.1%
American Academy of Developmental Medicine and Dentistry	26	26	50.0%
TOTAL	18,897	779	4.1%

Survey Instrument

- Provider demographics
- Practice characteristics
- Didactic education and clinical training
- Barriers to providing care to patients with special needs
- Facilitators of providing care to patients with special needs

Demographics of Respondents

Demographic Characteristics	Survey Sample		Dentists in the US ^a
	n	%	%
Gender			
Male	318	51.1%	67.7%
Female	304	48.9%	32.3%
Total	622	100.0%	100.0%
Age (years)			
25-34	132	18.6%	16.9%
35-44	172	24.3%	23.4%
45-54	133	18.8%	21.1%
55-64	168	23.7%	22.8%
65+	104	14.7%	15.8%
Total	709	100.0%	100.0%
Race/ethnicity			
White	451	74.7%	73.6%
Asian	65	10.8%	15.8%
Underrepresented minority			
Hispanic, Latino/Spanish	44	7.3%	5.3%
Black or African American	25	4.1%	4.3%
American Indian or Alaska Native, other	19	3.1%	1.0%
Total	604	100.0%	100.0%

Practice Characteristics

Primary Practice Characteristics in 2018	n	%
Specialty		
General practice	478	65.8%
Pediatric dentistry	227	31.2%
Other ^a	22	3.0%
TOTAL	727	100.0%
Employment situation		
Owner	394	51.7%
Employee	324	42.5%
Other ^b	44	5.8%
TOTAL	762	100.0%
Practice setting		
Private dental practice (full or part time)	469	61.2%
Community health center/safety net clinic, IHS, VA facility	84	11.0%
Academic dental center	66	8.6%
Hospital	54	7.1%
Large group practice (specialty, multispecialty)	48	6.3%
Dental management/support organization	24	3.1%
Other ^c	21	2.7%
TOTAL	766	100.0%

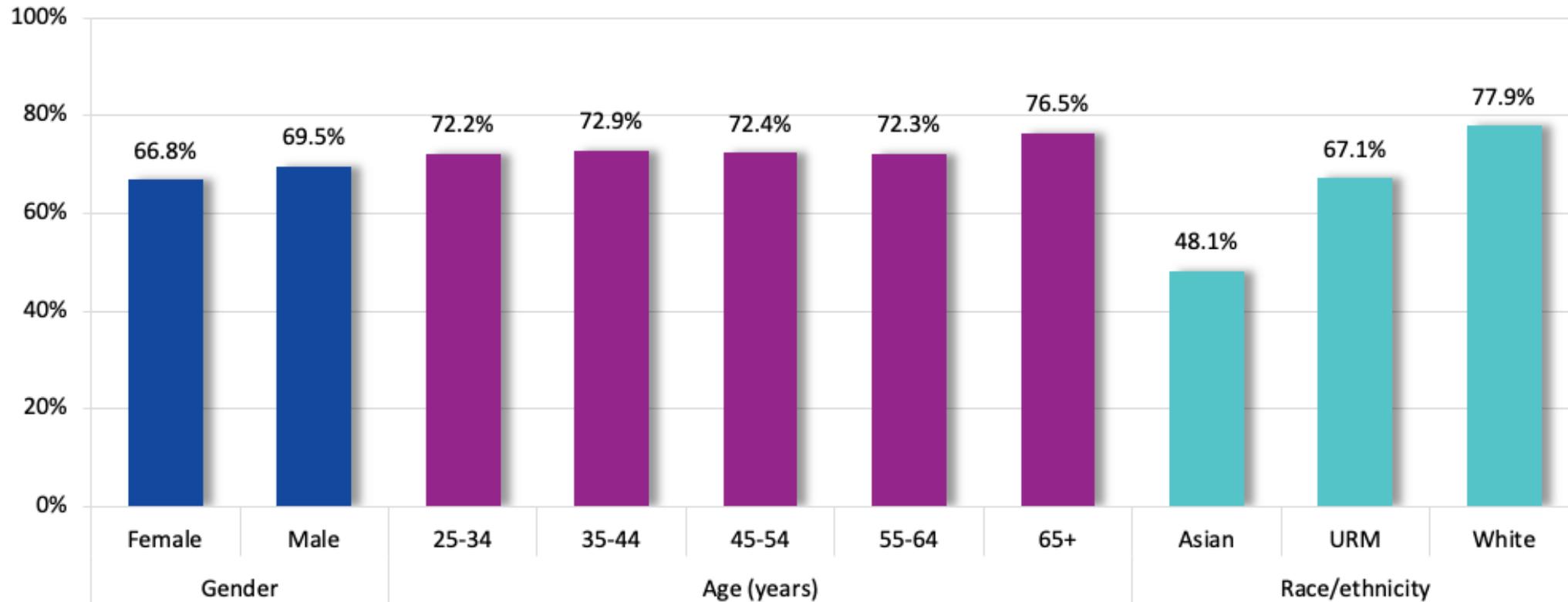
Do you provide care to patients with special needs?

The majority of respondents reported that they do provide dental services to patients with special needs.

In a typical month, how many patients with special needs do you treat?

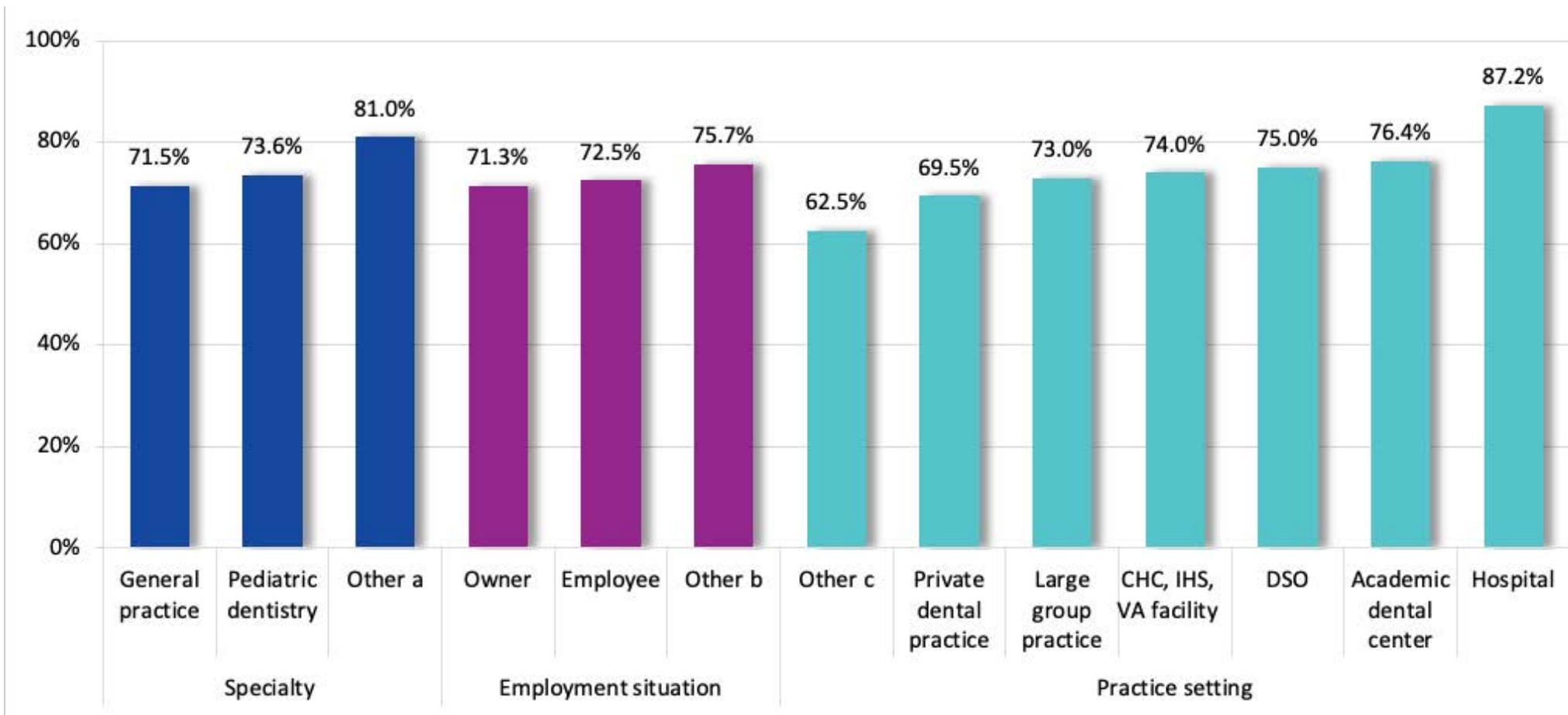
- “None or Few” (27.8%) = provision of dental services for up to 10 patients with special needs in 1 or 2 of the 3 age cohorts
- “Many” (72.2%) = provision of dental services for 1 to 10 patients with special needs in all age groups or provision of dental care for 11 or more patients with special needs in at least 1 age group

Demographics Associated with Providing Treatment to Patients with Special Needs



Race/ethnicity is significant at the .05 level. Gender and age not significant.

Practice Characteristics Associated with Providing Treatment to Patients with Special Needs



Observable, but not significant.

Patient Populations Treated - Disability Status

Patients With Special Needs Treated in 2018	n	%
Intellectual and/or developmental disabilities (eg, autism spectrum disorder, seizure disorders, cerebral palsy, genetic conditions like Down syndrome)	544	89.9%
Physical disabilities (eg, mobility or movement disorders such as those requiring the use of a wheelchair, involuntary or uncontrollable movements)	550	90.9%
Other acquired disabilities (dementia, traumatic brain injury, or other type of injury)	458	75.7%
I did not provide care to any patients with special needs	23	3.8%

Patient Populations Treated – Age & Insurance

Practice Capacity	Mean
Percentage of patients treated by age group	
Birth to 17 years of age	44.2%
18 to 64 years of age	36.5%
65 years of age and older	19.3%
Percentage of patients treated by insurance	
Covered by a private insurance program	44.1%
Covered by a public assistance program	38.2%
Not covered by an insurance program	17.7%

Key Findings

- The majority of respondents reported that they do provide dental services to patients with special needs.
- Provider demographics and practice characteristics associated with providing treatment to patients with special needs
 - Provider Race: White → URM → Asian
 - Pediatric Dentist → General Dentist
 - Practice Setting: Hospital → Academia → DSO → FQHC → Large group → Small private
- Patient populations treated:
 - Age: Children → Young and middle age adults → Older adults
 - Insurance Status: Privately insured → Publicly insured → Self pay
 - Type of Disability: Physical → Intellectual → Other

The Impact of Education and Training on Dentists' Decisions to Treat Patients With Special Needs

Margaret Langelier, MSHSA

Background

- In 2004, the Commission on Dental Accreditation (CODA) added Standard 2-25, charging dental education programs with integrating a new competency into predoctoral curricula
 - “Graduates must be competent in *assessing* the treatment needs...”
 - No requirement for competency in *treating* patients with special needs
- In 2019, CODA Standard 2-25 was again modified
 - New directive that dental school graduates must be competent in *assessing and managing* the treatment of patients with special needs
- One objective of this study was to understand if dentists received relevant training in treatment of patients with special needs and, if so, did training and education impact confidence and competence to treat patients with special needs in clinical practice?

Almost One-Third of Respondents Were Recent Dental School Graduates

- Half of survey respondents had graduated from dental school within the last 19 years
- Almost half of those who supplied information about postdoctoral training had completed a dental residency program and 16.5% had completed both a residency and fellowship program

Dental Education and Training Characteristics	n	%
Years since graduation		
0 to 9	222	30.9%
10 to 19	136	18.9%
20 to 29	125	17.4%
30 to 39	168	23.4%
40+	68	9.5%
Total	719	100.0%
Predoctoral education in dentistry		
US or Canada trained	208	96.3%
Foreign trained	8	3.7%
Total	216	100.0%
Postgraduate training in dentistry		
Residency program	110	46.4%
Fellowship or certificate program	22	9.3%
Both programs	39	16.5%
None	66	27.9%
Total	237	100.0%

Many Respondents Had Received Training in Treatment of Special Needs

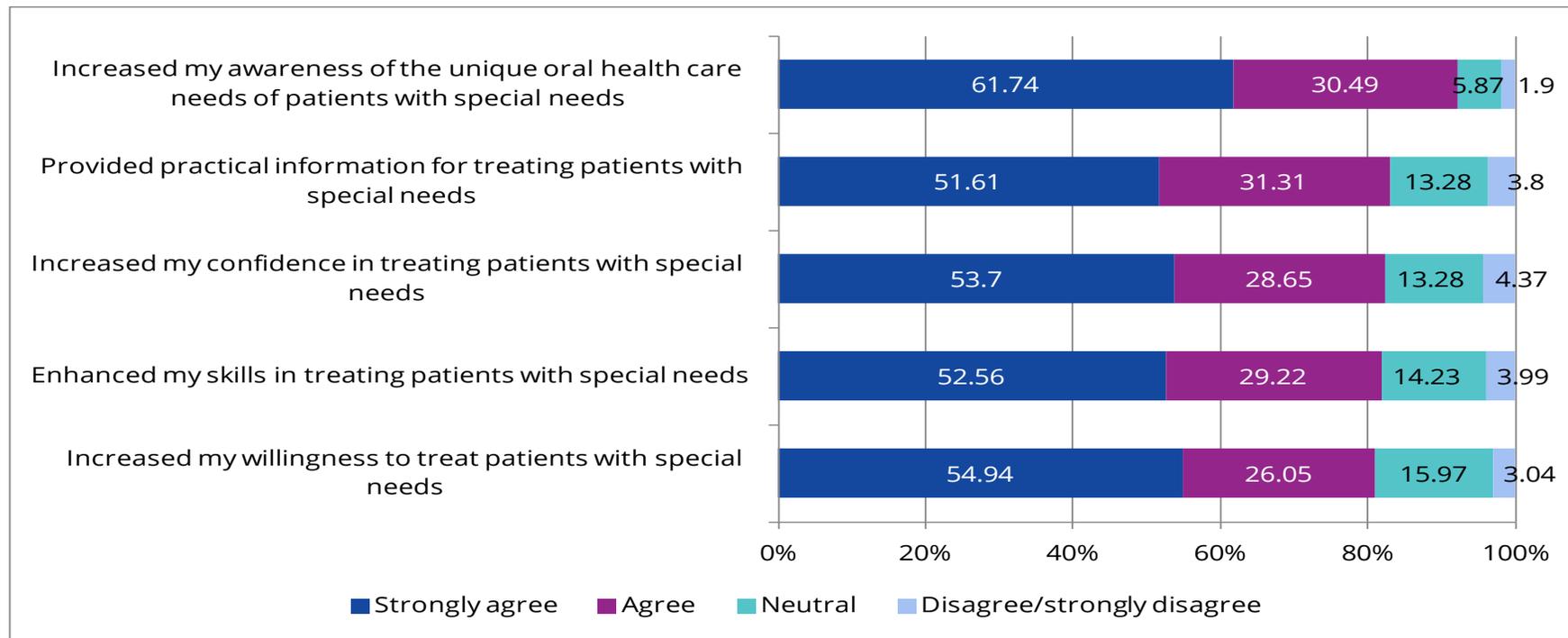
- A majority of dentists reported education, training, or other experience working with patients with special needs during didactic education in dental schools (58.7%), didactic education (54.2%) and/or clinical training (53.5%) in residency programs, and/or continuing education (56.1%)

Education, Training, or Other Experience Working With Patients With Special Needs	n	%
Sources of education and training (n=576)		
Dental school didactic education	338	58.7%
Dental school clinical training	276	47.9%
Residency, specialty, or fellowship program didactic education	312	54.2%
Residency, specialty, or fellowship program clinical education	308	53.5%
Continuing education	323	56.1%
Community involvement (eg, Special Olympics, Dental Lifeline, Mission of Mercy)	212	36.8%
Friends, family, or neighbors with special needs	170	29.5%
Other ^a	39	6.8%
None	33	5.7%
Main sources of education and training		
Residency, specialty, or fellowship program	343	59.5%
Dental school, <i>no</i> residency program	140	24.3%
Continuing education, <i>no</i> dental school or residency program	37	6.4%
Other sources, <i>no</i> dental school, residency program, or continuing education	23	4.0%
None	33	5.7%
Total	576	100.0%

Survey Respondents Agreed that Education and Training was Essential To Practice

- The majority of survey respondents strongly agreed or agreed that education, training, or other experiences working with patients with special needs increased their awareness (92.2%), confidence (82.4%), and willingness (81.0%) to treat people with special needs and that it provided practical information (82.9%) and/or enhanced their skills (81.8%) in treating patients with special needs

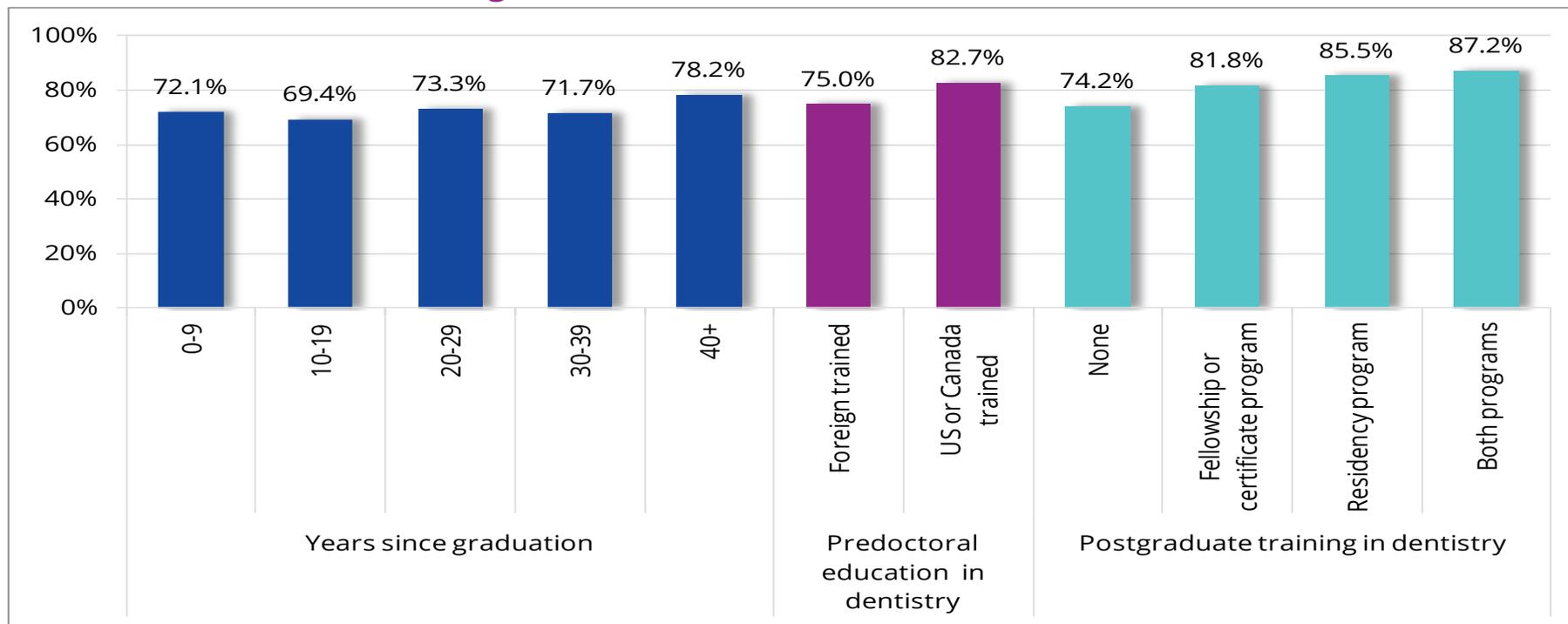
Dentists' Perceptions of Education and Preparedness to Provide Treatment to Patients With Special Needs (n=529)



Differences Were Observable but not Statistically Significant

- Although there was an overall increase in the proportion of survey respondents treating “many” patients with special needs commensurate with professional experience, location of dental school education, and levels of postdoctoral training in dentistry, these differences were not statistically significant.

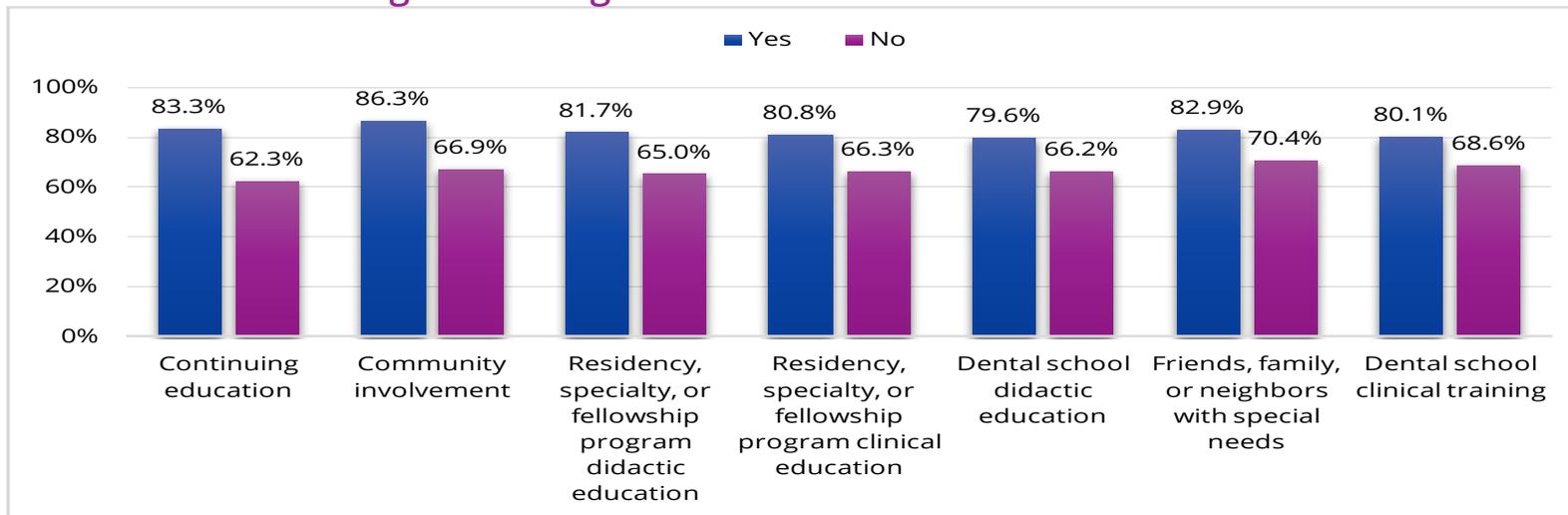
Percentage of Dentists Indicating That They Provided Dental Services for “Many” Patients With Special Needs by Dental Education and Training Characteristics of Dentists



Impact of Training and Experience

- Training or experience working with patients with special needs through continuing education (83.3% vs 62.3%; $P < .0001$), community involvement (86.3% vs 66.9%; $P < .0001$), and didactic education (81.7% vs 65.0%; $P < .0001$) and clinical training (80.8% vs 66.3%; $P < .0001$) in residency programs had the highest impact on the provision of dental care for “many” patients with special needs
- Survey respondents who reported having at least one of these sources of education, training, or experience in working with special needs populations were 1.7 times more likely to serve “many” patients with special needs than those who had none (75.8% vs 45.5%; $P = .0001$)

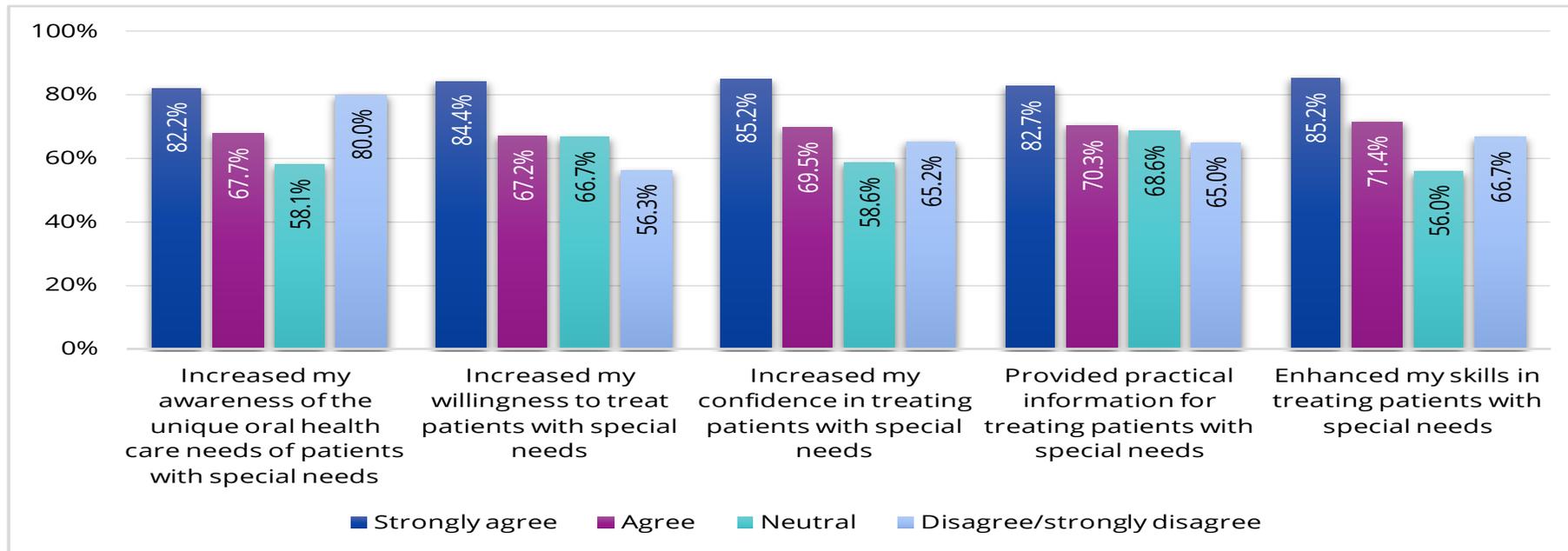
Percentage of Dentists Indicating That They Provided Dental Services for “Many” Patients With Special Needs by Dentists’ Education and Training in Working With These Patients



Awareness, Confidence, Enhanced Skills

- More dentists who strongly agreed or agreed that education and training increased their awareness (P=.0003), willingness (P<.0001), or confidence (P<.0001) and/or provided practical information (P=.0023) and enhanced their skills (P<.0001) to treat people with special needs treated “many” patients than did those who were neutral or disagreed or strongly disagreed with these statements

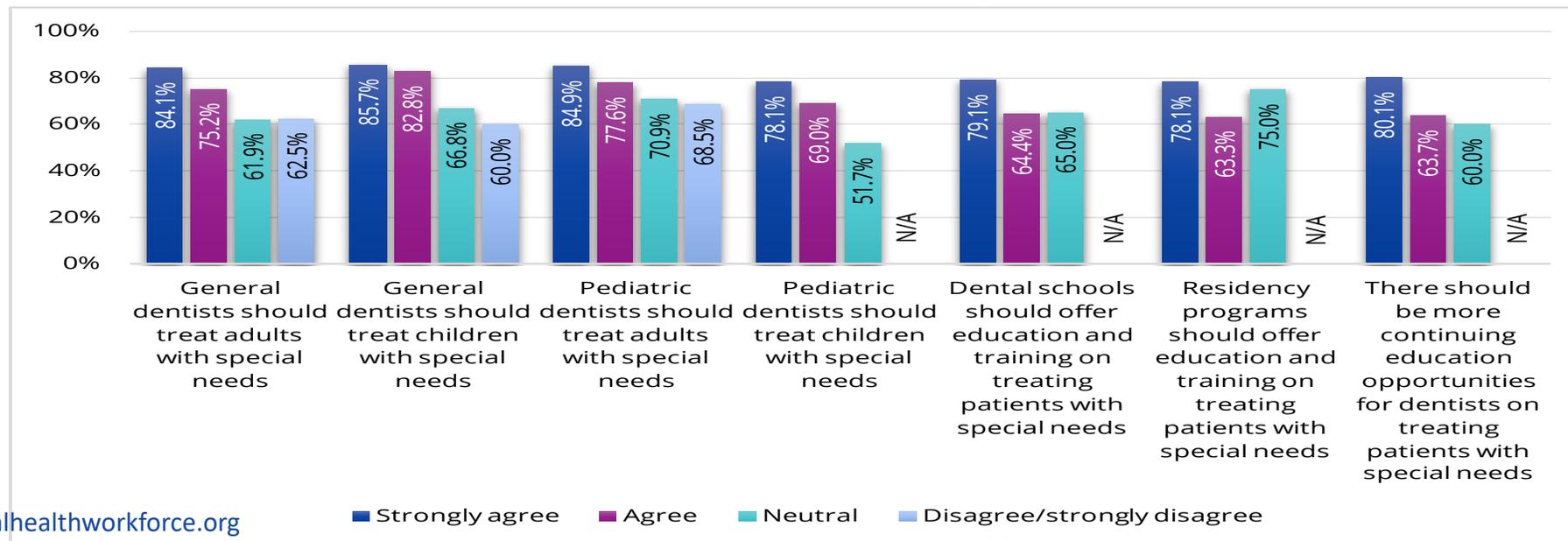
Percentage of Dentists Indicating That They Provided Dental Services for “Many” Patients With Special Needs by Dentists’ Perceptions of Education and Preparedness to Treat These Patients



Dentists' Perceptions of Opportunities for Education and Training and Types of Providers Who Should Treat Patients with Special Needs

- More dentists who strongly agreed or agreed that general dentists should treat adults with special needs ($P=.0003$); that general dentists should treat children with special needs ($P<.0001$); that pediatric dentists should treat adults with special needs ($P=.0232$); that pediatric dentists should treat children with special needs ($P=.0039$); and that dental schools ($P=.0070$), residency programs ($P=.0034$), and continuing education programs ($P=.0002$) should offer more opportunities for education and training on treating patients with special needs treated “many” patients with special needs than those who were neutral or disagreed or strongly disagreed (60.0% to 68.5%) with these statements

Percentage of Dentists Indicating That They Provided Dental Services for “Many” Patients With Special Needs by Dentists’ Perceptions of Opportunities for Education and Training and Types of Providers Who Should Treat These Patients



Key Findings

- Exposure to the complexities of treatment of people with special needs appears to be critical at all levels of dental education.
- Training or experience working with patients with special needs through continuing education, community involvement, and didactic education and clinical training in residency programs had the highest impact on the provision of dental care for “many” patients with special needs.
- In our survey, 59.5% of responding dentists who provided information about education and training received relevant training during a dental residency, specialty training, or fellowship program

Key Findings (Con't)

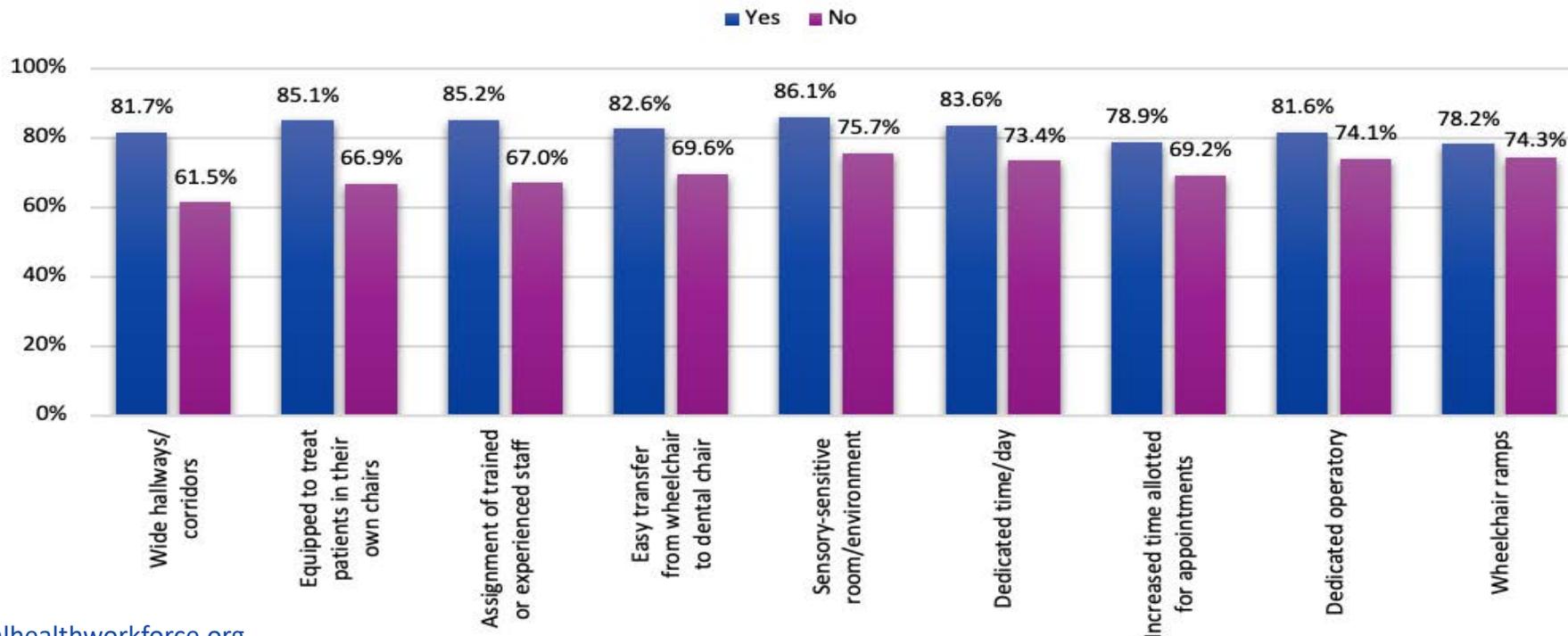
- Approximately 81% of dentists who completed a postdoctoral residency, specialty training, or fellowship treated “many” patients with special needs compared with 66% of those who did not indicate a residency program as a source of their personal education in special needs.
- Dentists who provided dental care to “many” patients with special needs were also more likely than dentists who treated “none or few” to indicate continuing education and community involvement with patients with special needs or advocacy organizations as sources of education, training, and experience in working with these patients.
- A significantly higher proportion of dentists who strongly agreed or agreed that their education and training increased their willingness to serve patients with special needs, that it increased their confidence to treat, that it provided practical information about treating such patients, and that it enhanced their skills to treat these patients were also dentists who provided services to “many” patients with special needs compared with other dentists.

Barriers & Facilitators to Treating Patients with Special Needs

Jean Moore, DrPH, FAAN

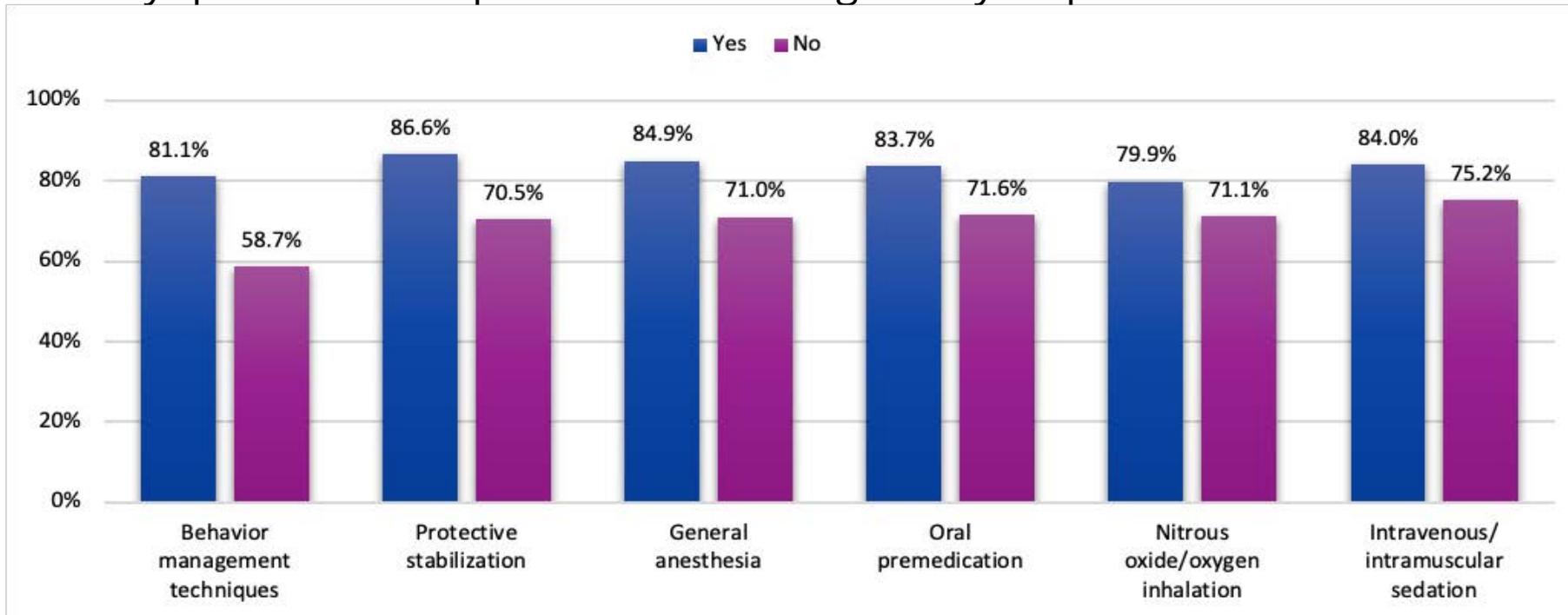
Practice Accommodations Associated with the Provision of Treatment to Patients with Special Needs

- Respondents reporting at least one accommodation in their primary practice for patients with special needs were 2 times more likely to serve “many” patients with special needs than those who had none (76.9% vs 40.0%).
- Practice accommodations such as wide hallways or corridors, being equipped to treat patients in their own chairs, and assignment of trained or experienced staff had the highest impact on dentists’ decisions to treat “many” patients with special needs.



Interventions Associated with the Provision of Treatment to Patients with Special Needs

- Respondents who reported using at least one psychotherapeutic or pharmacologic intervention were 1.5 times more likely to serve “many” patients with special needs than those who used none (78.8% vs 52.3%).
- The use of behavior management techniques and protective stabilization when treating patients with special needs were the factors with the highest influence on the provision of dental care for “many” patients with special needs among survey respondents.



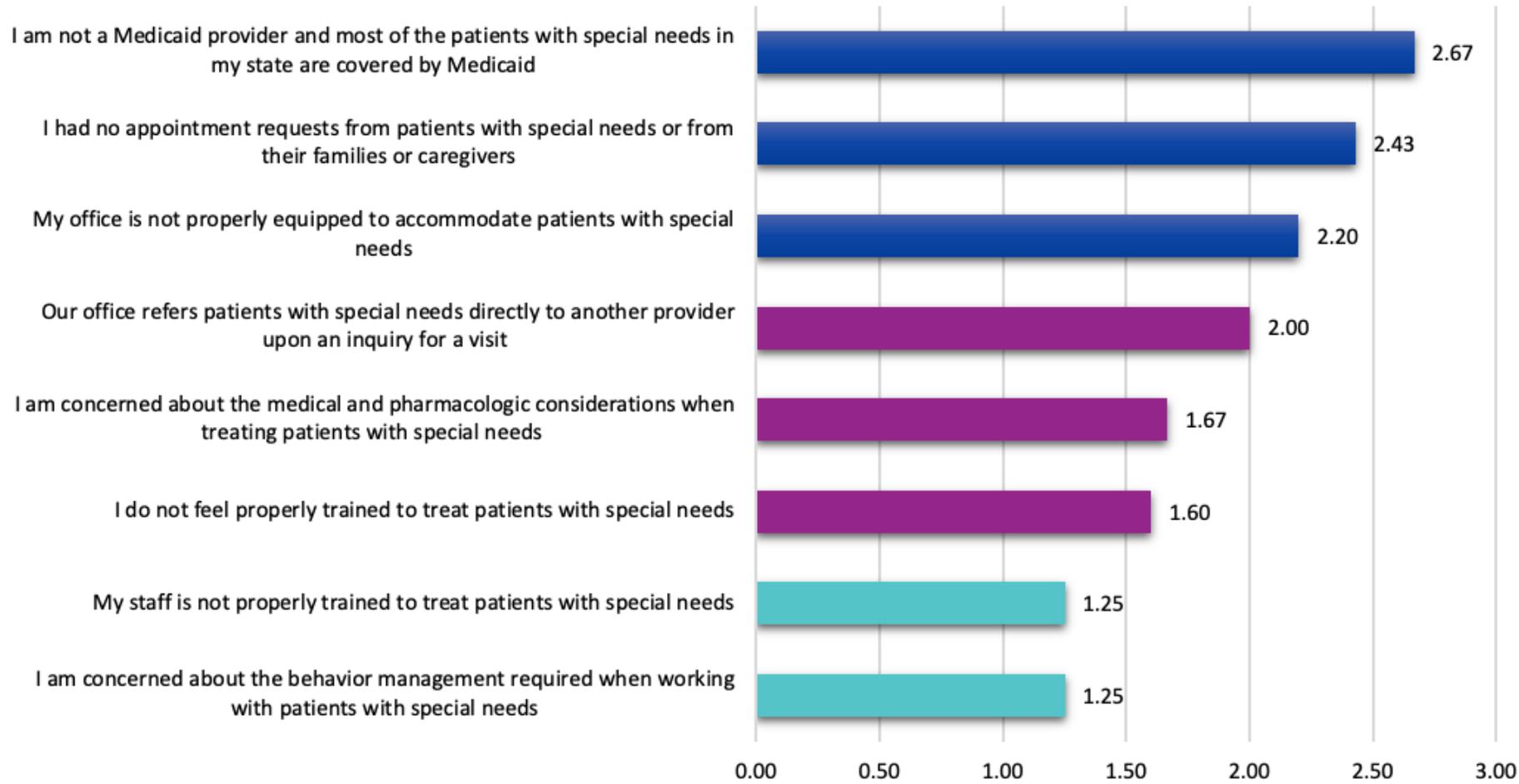
Referral Sources Associated with the Provision of Treatment to Patients with Special Needs

Referral Sources for Patients With Special Needs Treated in the Primary Practice	n	%
Family/friends of patient	341	59.9%
Patient/family/caregiver self-selected my practice	337	59.2%
General dentist	308	54.1%
Medical provider	259	45.5%
Case manager (e.g., community-based organization, state agency, group home)	225	39.5%
Specialty dentist	171	30.1%
Other ^a	47	8.3%

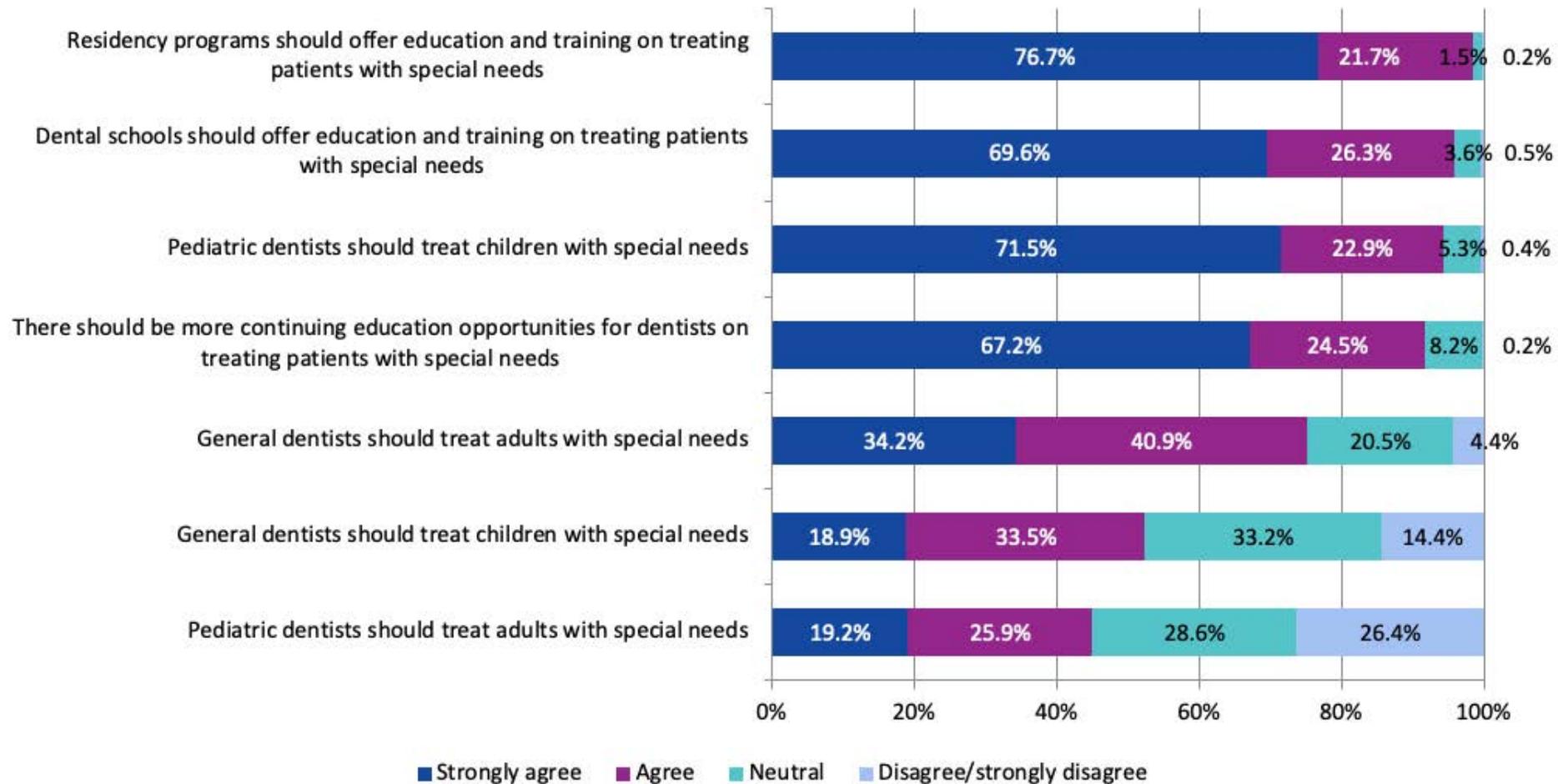
Note: Totals may vary due to missing responses.

^a “Other referral sources” include health/dental insurance companies, state Medicaid programs, nursing home long-term care facilities, residential treatment facilities, school-based programs, hospitals.

Barriers to Providing Dental Care to Patients With Special Needs



Dentists' Perceptions: Opportunities for Education and Training, Who Should Treat Patients with Special Needs



Key Findings

- Facilitators among dentists who provided dental care to patients with special needs:
 - Practice accommodations: increased time allotted for appointments, wide hallways/corridors, wheelchair ramps, easy transfer to dental chair, equipment to treat patients in their own wheelchair, and appropriately trained or experienced staff
 - Psychotherapeutic or pharmacologic interventions: behavior management techniques, nitrous oxide/oxygen inhalation, oral premedication, general anesthesia, and protective stabilization
- Barriers among dentists who did not provide dental care to patients with special needs:
 - Not being a Medicaid provider
 - Not having appointment requests from patients with special needs
 - Not having a dental office that was properly equipped to accommodate patients with special needs

Parental Perspectives on Access to Oral Health Care for Children with Special Needs

Simona Surdu, MD, PhD

Introduction

- About 14.6 million children in the US had a special health care need in 2012 (AAPD, 2016). Families of children with special needs have identified oral health as the most common unmet health care need for their child (Lewis 2009).
- Factors that may influence access to oral health services include demographics, socioeconomic factors, geography, oral health literacy, insurance status, cost of dental care, travel time, and availability of dental providers.
- Incorporating the consumer perspective on access to oral health services is important in the design of public policies and programs to improve the oral health status of underserved people.

American Academy of Pediatric Dentistry. *Policy on Transitioning from a Pediatric-Centered to an Adult-Centered Dental Home for Individuals with Special Health Care Needs*. AAPD, Revised 2016.

Lewis C, Robertson AS, Phelps S. Unmet dental care needs among children with special health care needs: implications for the medical home. *Pediatrics*. 2005.

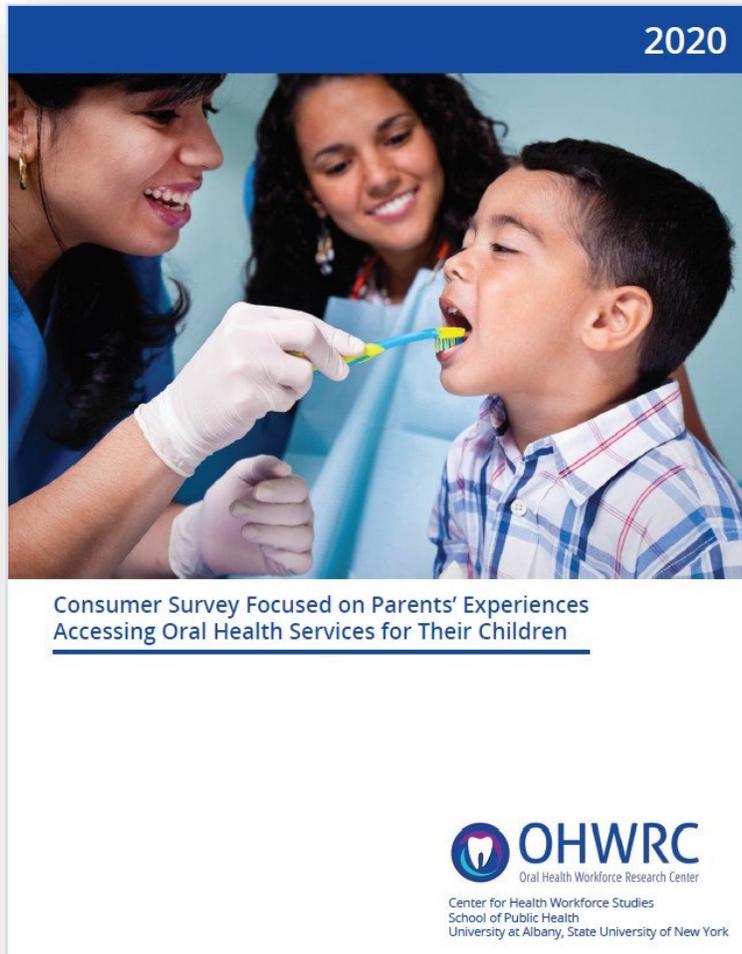
Purpose of the Study

- The objectives of this study were to highlight unique access barriers for children, including specific barriers for underserved children living in rural or other underserved geographic areas, underrepresented minorities, and children with special needs.
- The OHWRC collaborated with the Workforce Studies team at the Association of American Medical Colleges (AAMC) to conduct a survey of the US population to:
 - Obtain information from consumers on factors contributing to oral health disparities among children, including children with special needs
 - Evaluate the impact of respondents characteristics and other factors identified by consumers on children's access to and utilization of oral health services

Methods: Data Collection

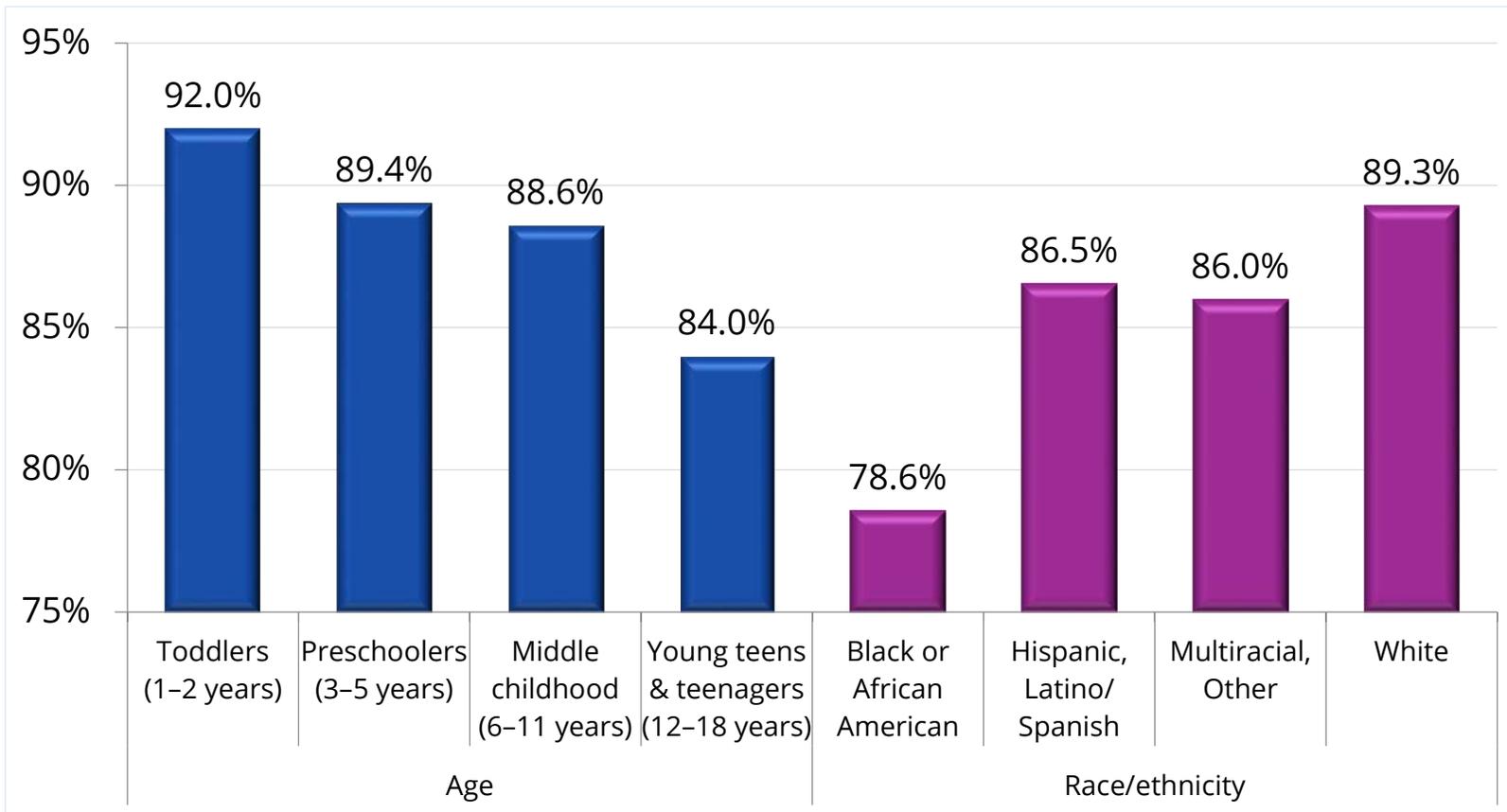
- This research was based on data collected through the Consumer Survey of Health Care Access fielded by the AAMC in 2019. The survey is an online survey conducted biannually using a national panel of about 1.2 million adults.
- Oral health data were collected from parents of children under 18 years of age who were living in their household.
- Oral health module was designed by our Center and consisted of 25 questions asking about:
 - Respondents' ability to obtain needed oral health care for their children
 - Children's oral health status and oral health behaviors
 - Parental oral health literacy and attitudes toward oral health
 - Perceived barriers to and facilitators of oral health services for children
- The survey also collected extensive information on demographics, socioeconomic factors, and urban/rural location of respondents residence.

Key Findings



- The survey sample comprised of 1,785 parent respondents with 3,070 children.
- About 1 in 4 children (26.4%) in the survey sample had a special need as reported by their parents.
- Definition of a special need included a diagnosed *emotional, developmental, or behavioral health* condition requiring treatment or counseling.

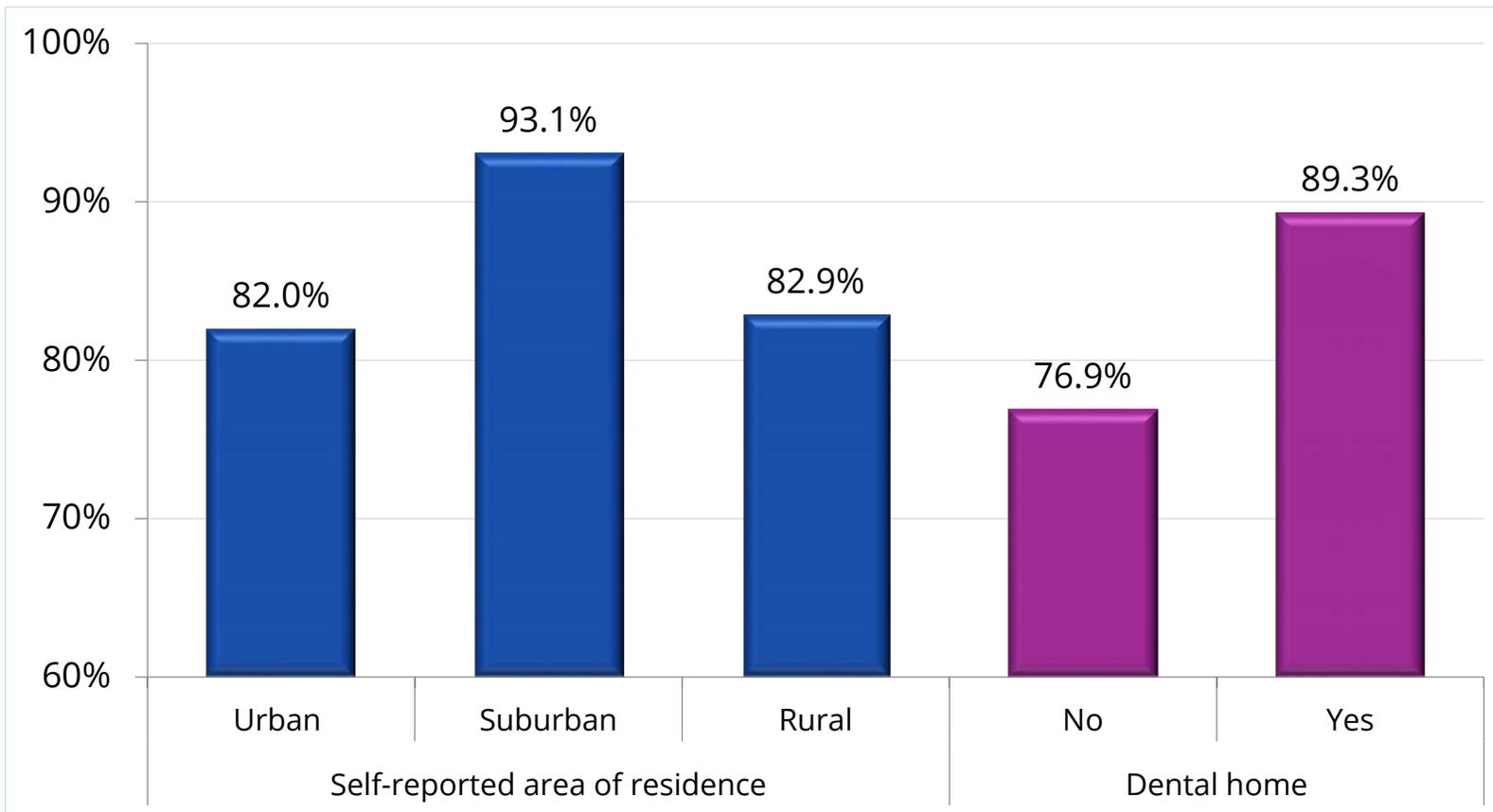
Children With Special Needs: Utilization of Needed Dental Services by Demographics



- Overall, about 87.4% of children with special needs *always* received dental care as needed in the past year. Yet, 13% only *sometimes* received care or *did not receive any* needed dental services.
- Utilization of care varied by demographics. **Older children & children from underrepresented minority groups** received dental services less often than others in the last year.

Note: There was a borderline statistically significant difference, estimated using Pearson chi-square test, between children who received needed dental care vs. those who did not by age (12-18 vs. 1-11 years; $P=.068$) and a statistically significant trend, estimated using linear regression ($P=.039$).

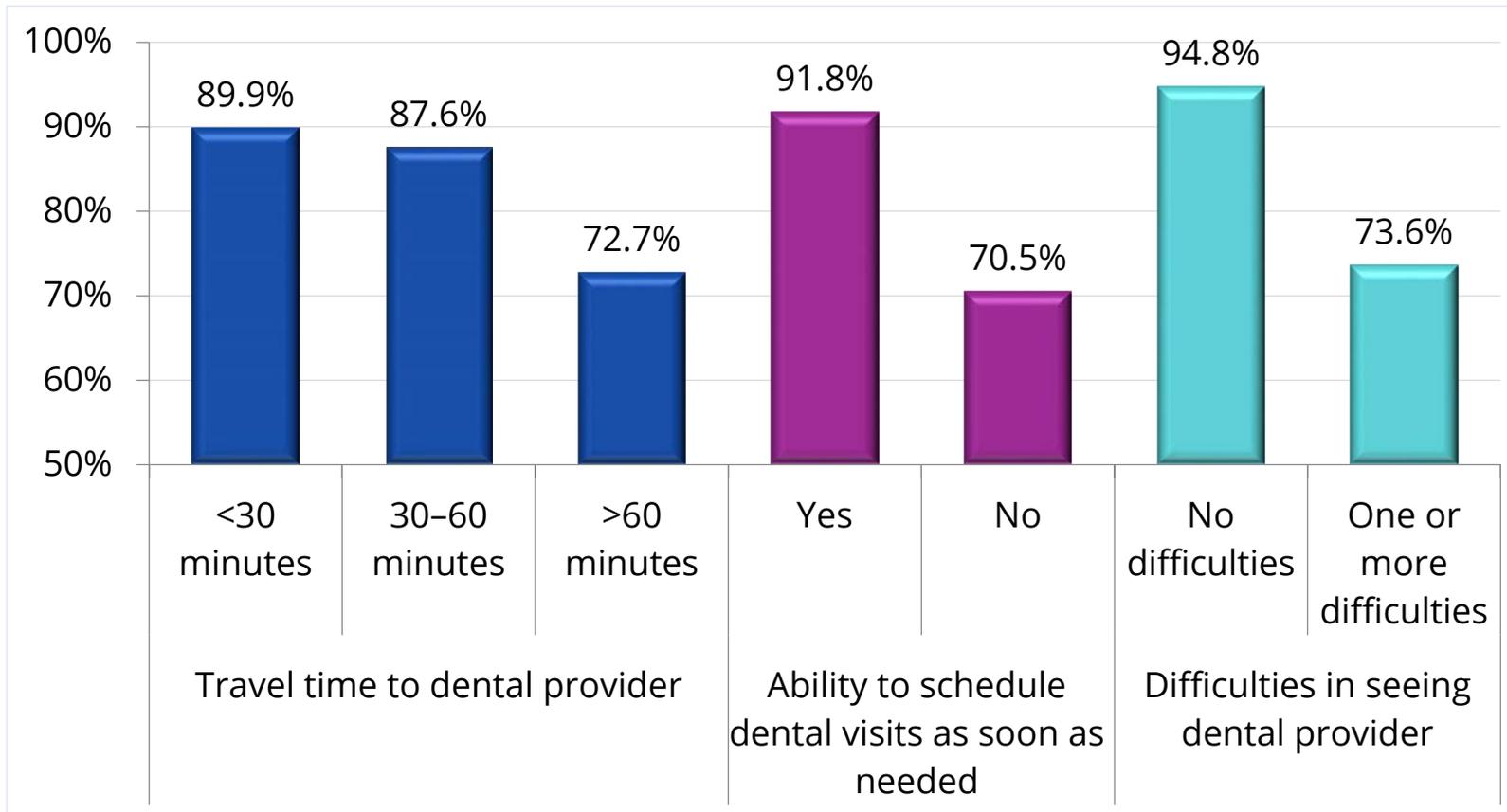
Children With Special Needs: Utilization of Needed Dental Services by Geography & Dental Home



- Children with special needs who lived in urban or rural areas and/or did not have an established dental home were less likely to receive needed dental care than those residing in suburban areas and those who had a dental home.

Note: There were statistically significant differences, estimated using Pearson chi-square tests, between children who received needed dental care vs. those who did not by **area of residence** ($P < .001$) and having a particular dental provider from whom a child usually receives needed dental care (**dental home**, $P < .001$).

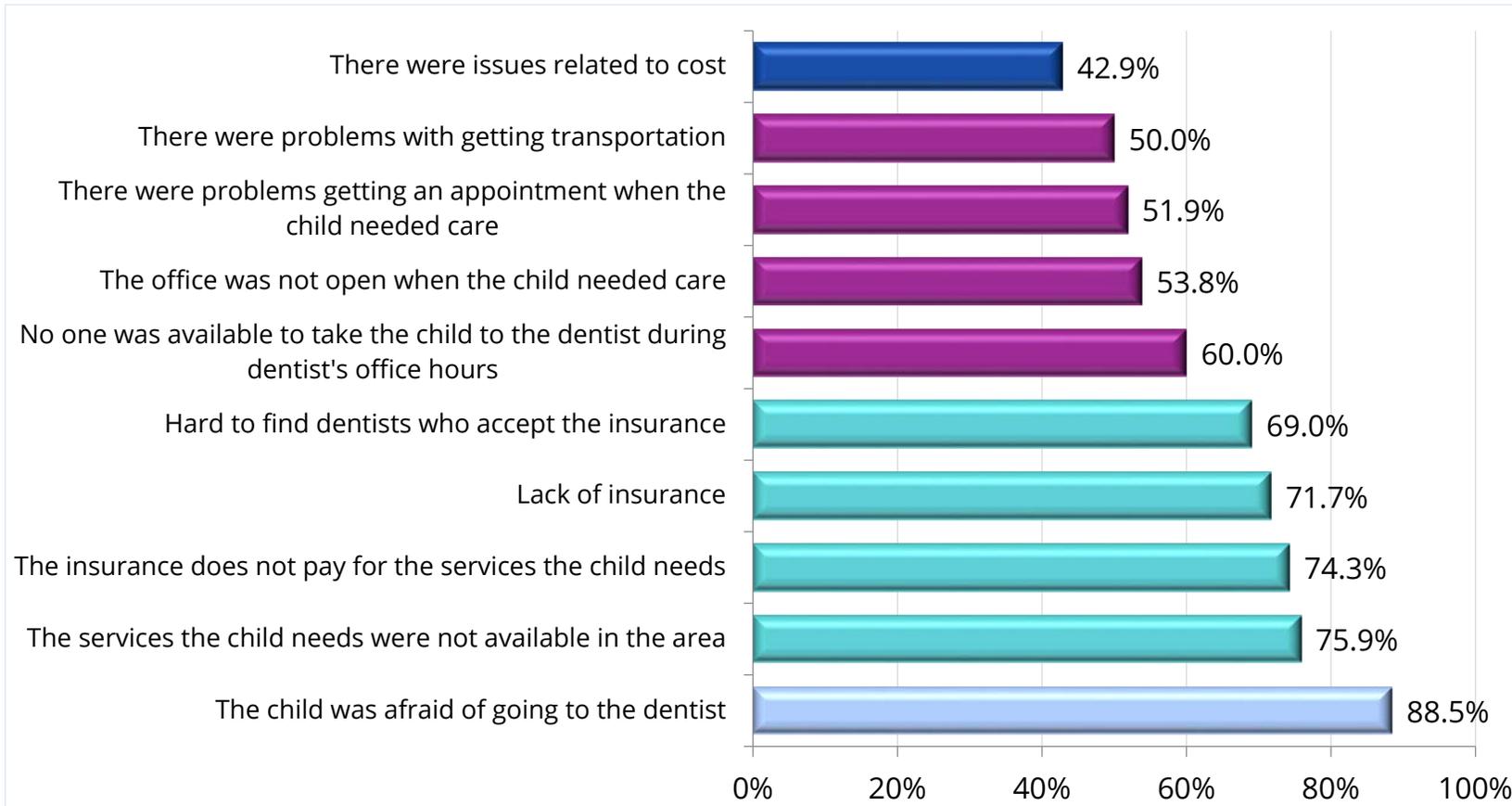
Children With Special Needs: Utilization of Needed Dental Services by Access-to-Care Difficulties



- Children with special needs who had to travel >60 minutes to a dental provider or whose parents were not able to schedule a dental visit or had difficulties in seeing a dentist as often as their child needed were less likely to receive dental care than other children.

Note: There were statistically significant differences, estimated using Pearson chi-square tests, between children who received needed dental care vs. those who did not by **travel time to a dental provider** ($P=.023$), **ability to schedule a dental visit** ($P<.001$), and **difficulty in seeing a dental provider** ($P<.001$).

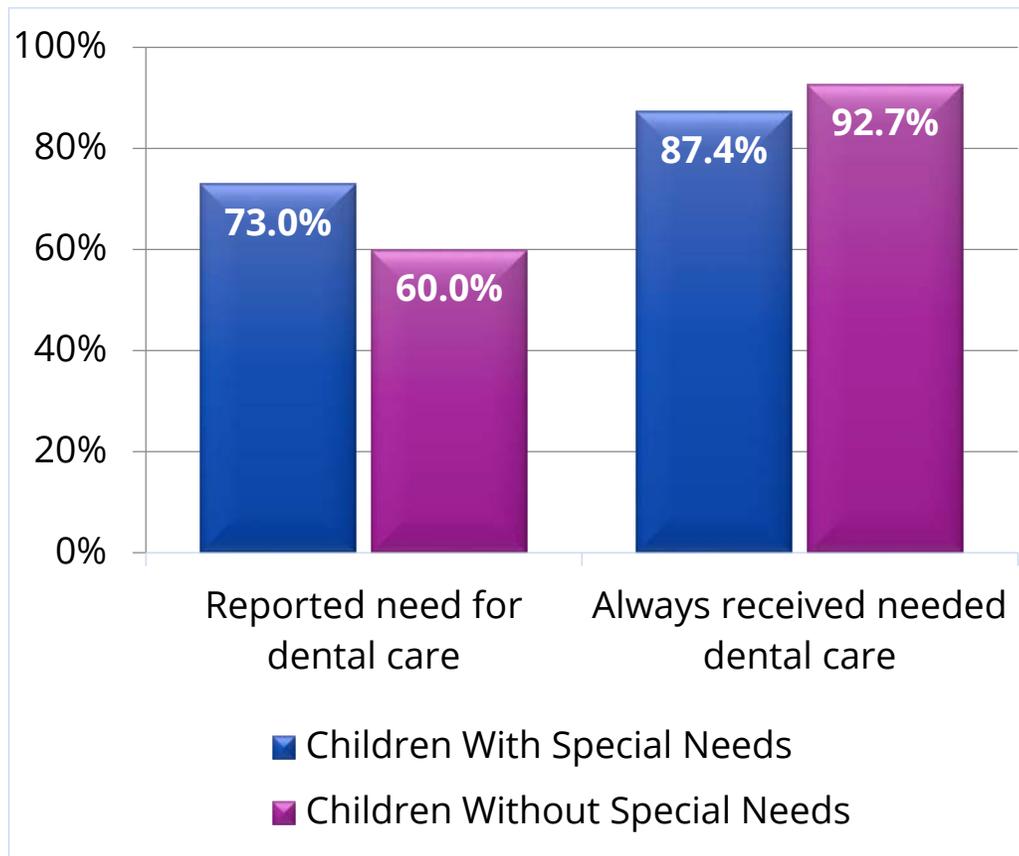
Children With Special Needs: Utilization of Needed Dental Services by Parental Perceived Barriers



- Utilization of needed dental care in the past year was significantly lower for children with special needs whose parents reported issues related to cost, difficulties due to location & hours of the dental practice, and problems related to dental insurance.

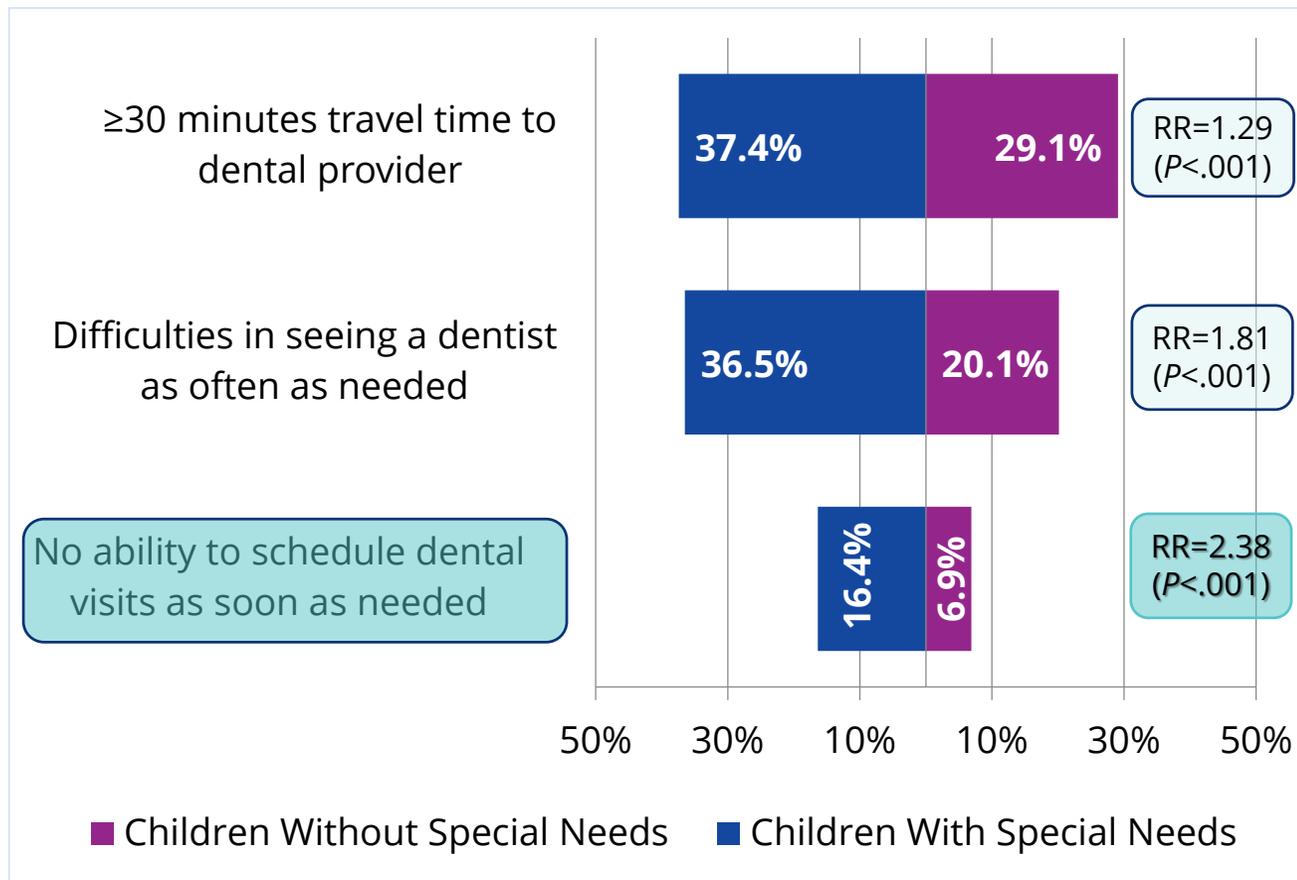
Note: There were statistically significant differences, estimated using Pearson chi-square tests, between children who received the needed dental care vs. those who did not by all reported barriers in seeing a dental provider as often as needed (Yes/No; $P < .01$), except for availability of dental services in the area ($P = .084$) and dental anxiety ($P = .824$).

Children With and Without Special Needs: A Comparison of Their Need for and Utilization of Dental Services in the Past 12 Months



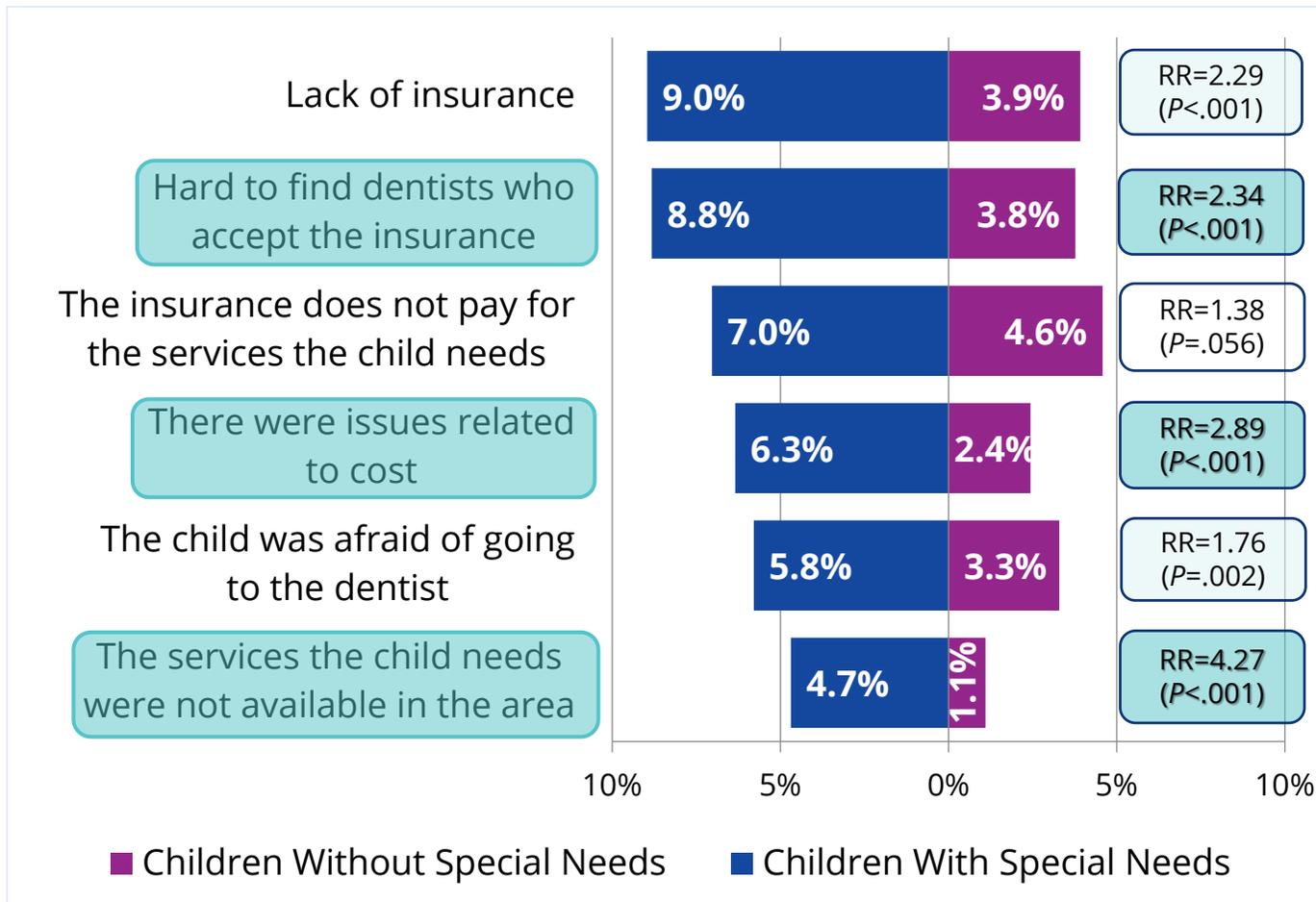
- Parents were **more likely to report a need for dental care** for children with special needs than for children without such needs in the past year (RR=1.22; $P<.001$).
- Children with special needs were **less likely to receive needed dental care** in the past year compared with children without special needs (RR=0.94; $P<.001$).

Children With and Without Special Needs: A Comparison of Their Access-to-Care



- More than 1 in 5 children with and without special needs had to travel ≥30 min to obtain care & had 1+ difficulties in seeing a dentist; yet, children with special needs were **disproportionally more likely** to experience these access-to-care issues.
- Parents of children with special needs were also **disproportionally more likely** to report the inability to schedule dental visits when needed compared to others.

Children With and Without Special Needs: A Comparison of Parental Perceived Barriers



- The most commonly reported barriers to care were (1) lack of dental insurance, (2) finding dentists who accepted the insurance, and (3) insurance not paying for needed services among both children with and without special needs.
- Children with special needs were disproportionately more likely to experience (1) unavailability of services in their area, (2) cost issues, and (3) difficulty finding dentists who accepted their insurance.

Conclusions and Implications

- Associations of demographic & geographic factors with access to dental care suggest that present efforts to link children with special needs to oral health services remain important policy initiatives to reduce oral health disparities.
- Parents' identification of difficulties related to cost and insurance status suggest the importance of policy strategies to reduce financial barriers to oral health services for families with children with special needs.
- Study findings also suggest that current efforts to mediate structural barriers (ie, dental practice hours, distance to dental providers, availability of dental providers) should be amplified in order to improve access to dental care for children with special needs.

Thank You

Questions?

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