#### Pediatric Dental Workforce in 2016 and Beyond



Paul Casamassimo, DDS, MS Chief Policy Officer Robin Wright, PhD Director Pediatric Oral Health Research and Policy Center American Academy of Pediatric Dentistry



THE BIG AUTHORITY ON little teeth



# Why Did We Do The Study? Quick review

- The number of pediatric dentists has grown, yet disparities continue
- New national evidence suggests that more treatment is being provided to young children, and those from underrepresented groups and we see those kids
- Previous studies show that pediatric dentists fill a niche in the oral care system for special needs
- Like all of dentistry, our demographics are changing with: (1) more women, (2) more indebtedness, and (3) more employee arrangements, among other things





# **Dental Demand**







## **Child Population Projections**

- Number of children ages 0–17 in the US in 2017: 73.6 million
- \* 23% of the total population (325 million)
- Number of children ages 0–17 in the US projected for 2050: 77 million
- \* 20% of the total population (388 million)

Source: US Census, United States Population Projections: 2000 to 2050





# **Demographic Projections**

<b>US</b> Population	by Ra	ce and I	Hispanic	Origin
----------------------	-------	----------	----------	--------

	2015	2050
White, Non-Hispanic	203,208	203,347
Hispanic	57,711	132,792
Black	42,137	56,944
Asian	16,527	34,399
Two or more races	6,435	16,183
American/Alaska Native	3,472	5,462
Hawaiian/Pacific Islander	662	1,222





# **Market Share**

Age Group	Current Share
Under 2	43%
2 to 4	40%
5 to 12	23%
13 to 17	
All Under 17	26%





# **Dental Visits by Age**

Age	Dental Visit
Children birth to age 20	48%
Children under age 6	25%
Children ages 6 – 12	59%

Source: Manski RJ and Rohde F. Research Findings No. 38. Dental Services: Use, Expenses, Source of Payment, Coverage and Procedure Type, 1996–2015. Rockville, MD: Agency for Healthcare Research and Quality. November 2017.





# Dental Visits by Race and Ethnicity

Race and Ethnicity	Dental Visit
Non-Hispanic Black	30%
Hispanic	33%
Other	40%
Non-Hispanic White	49%

Source: Manski RJ and Rohde F. Research Findings No. 38. Dental Services: Use, Expenses, Source of Payment, Coverage and Procedure Type, 1996–2015. Rockville, MD: Agency for Healthcare Research and Quality. November 2017.





# **Dental Caries by Age**

Age of Child	Total Caries	Untreated	
		Caries	
2 – 5	18%	9%	
6 – 11	45%	15%	
12 – 19	54%	13%	

Source: Fleming E, Afful J. Prevalence of Total and Untreated Dental Caries Among Youth: United States, 2015-2016. NCHS Data Brief. 2018;(307):1-8.





# Dental Caries by Race and Ethnicity

Race and Ethnicity	Total	Untreated
	Caries	Caries
Hispanic	52%	14%
Non-Hispanic Black	44%	17%
Asian	43%	11%
Non-Hispanic White	39%	12%

Source: Fleming E, Afful J. Prevalence of Total and Untreated Dental Caries Among Youth: United States, 2015-2016. NCHS Data Brief. 2018;(307):1-8.





# **Dental Market Supply**







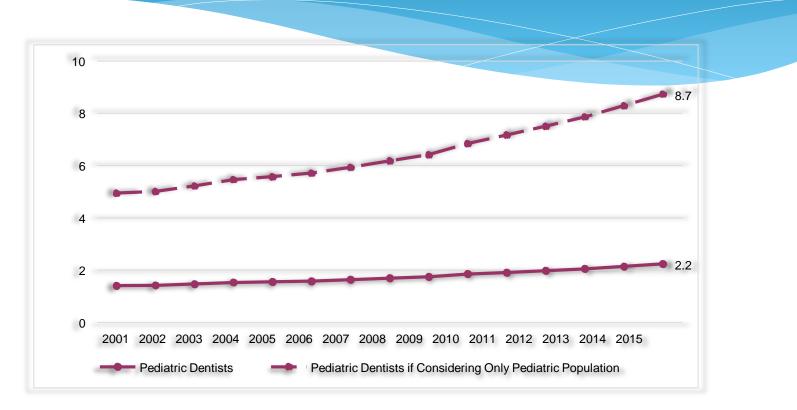
# Professionally Active Dentists in the U.S.

<ul> <li>General Dentist</li> </ul>
* Orthodontist
* Pediatric Dentist
* Oral Surgeon
* Periodontist
* Endodontist
* Prosthodontist
* Public Health
* Oral Radiology
THE BIG AUTHORITY ON little teeth

156,992 10,658 7,778 7,546 5,790 5,664 3,708 827 466



# **Supply of Pediatric Dentists**

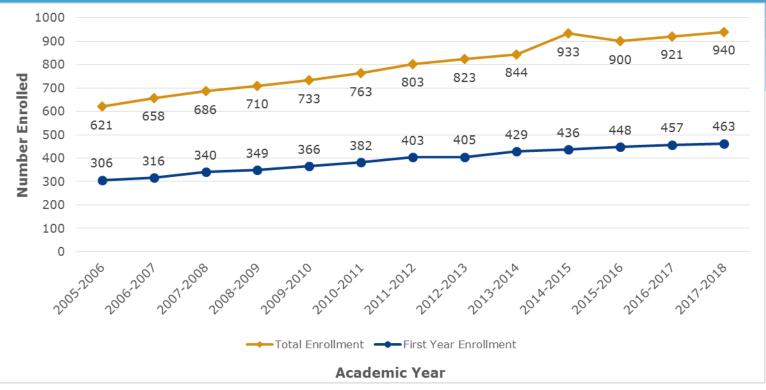


Source: ADA Health Policy Institute, 2001-2015; U.S. Census Bureau





# Pediatric Dental Program Enrollment



Source: American Dental Association, Health Policy Institute, *Survey of Advanced Dental Education*, 2016-2017



AMERICA'S PEDIATRIC DENTISTS THE BIG AUTHORITY ON little teeth



# Projected Supply of FTE Pediatric Dentists, 2016-2030

Year	Pediatric Dentists
2016	6,530
2020	7,620
2025	9,090
2030	10,560





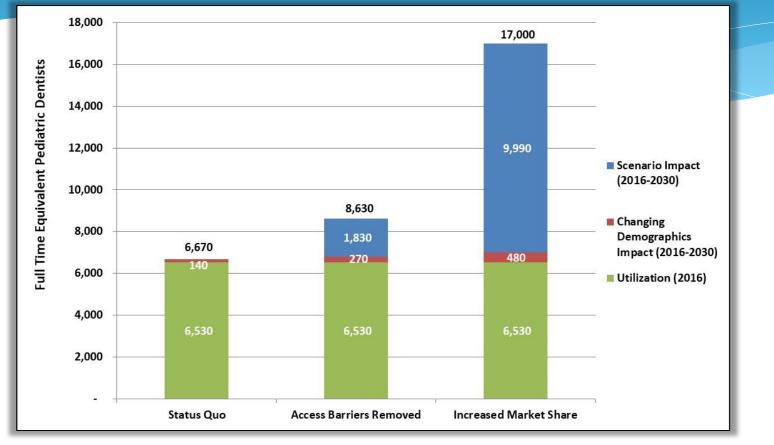
#### Projected Supply of FTE Pediatric Dentists, 2016-2030







#### Pediatric Dentist Supply in 2016 Projected Demand in 2030







# **Market Share**

Age Group	Current Share	Scenario Share
Under 2	43%	1000/
2 to 4	40%	100%
5 to 12	23%	80%
13 to 17	-	20%
Under 17	26%	62%





# **Our Growth & Access to Care**

- Over 70% of us see Medicaid children, the most in dentistry
- \* 100% of us see special patients
- \* We and oral surgeons are most likely to be in hospitals and interdisciplinary teams
- \* We are most likely to do case management
- \* We are most likely to treat very young children
- \* We are most likely to see infants
- \* We are the only ones managing behaviors





# Pediatric Dentist Distribution







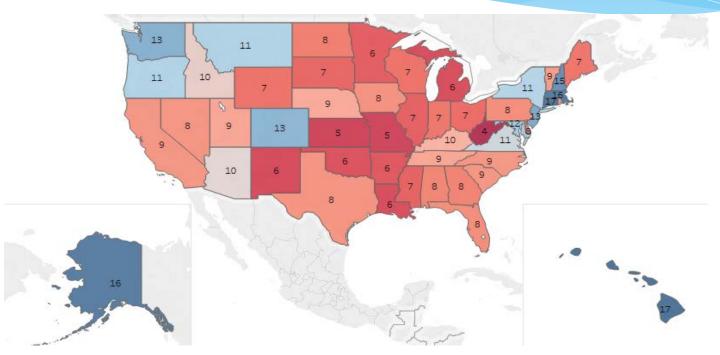
#### Supply of Full-Time Equivalent Pediatric Dentists by Region, 2016

Region		FTEs per 100,000 Children
Northeast	1,378	12
Midwest	1,037	7
South	2,376	8
West	1,742	12
Nationwide	6,533	9





# Supply of Pediatric Dentists by State, 2016







What's Next for Us? What Are the Policy and Other Implications?

- \* Are there too many pediatric dentists or not enough?
- \* Are we in the right places to help children?
- \* What do the results mean for access to care?
- \* Should we be doing more about attitudes than access?
- \* How about some policy recommendations?





# The Great Unknown.... ...and Known

- \* Caries rate in the future will it improve?
- True population growth and where likely to grow in poorer segments of society
- \* Economy will we see oral health become a luxury rather than a value or vice versa
- \* Practice size and ownership will business models drive workforce?
- \* Payment mechanisms will we see pay for performance replace fee-for-service?
- \* Will others do pediatric dentistry?





The Great Unknown.... ...and Known

- \* Healthcare reform will oral health be a mandate?
- \* Gender mix of specialty does it make a difference?
- \* General dentist engagement will highly indebted GPs refer more kids or fewer?
- \* Will demand increase?
- \* Will the look of pediatric dental practice change?





# Do We Need A PR Campaign?

- Last century saw an AAPD dues supplement/assessment
- Other specialties have and continue to market
- \* Pediatricians captured the market how?
- \* Market to public or profession(s) or both?





# Policy Dreaming....

- Reorient Title VII to get pediatric dentists into lower population areas
- Prioritize funding for Pediatric Dentistry/MPH programs
- In health care reform, build in pay-forperformance to acknowledge early prevention and unique treatment abilities
- Work for a meaningful mandate in healthcare reform
- Add differentials for case management, behavior guidance and prevention





# **Going Forward....** Building on the Workforce Study

- Numbers tell only a part of the story, but are a solid beginning in effecting change
- More research is needed into successful integration of pediatric dentistry in small and underserved communities
- Workforce/workplace models need to be studied: groups, embedded pediatric dentists, hospital-based care
- Pediatric dentistry remains a solid career choice and sorely needed specialty





# Look for More from AAPD

- Our work is just beginning and we need feedback on this study's findings
- Our plan is to disseminate findings to and solicit responses from a broad community interested in children's oral health
- We encourage comments and suggestions on this study and directions for the future











# For more information...

Robin Wright, PhD Director AAPD Research and Policy Center <u>rwright@aapd.org</u> 312-227-2169



