



Reshaping the Future of Pediatric Healthcare Delivery

Susan Kressly, MD, FAAP
AAP Immediate Past President

Disclosure

Dr. Kressly discloses that she and her husband have ownership shares in Connexin Software.

I do not intend to discuss an unapproved/investigative use of a commercial product/device in our presentation.

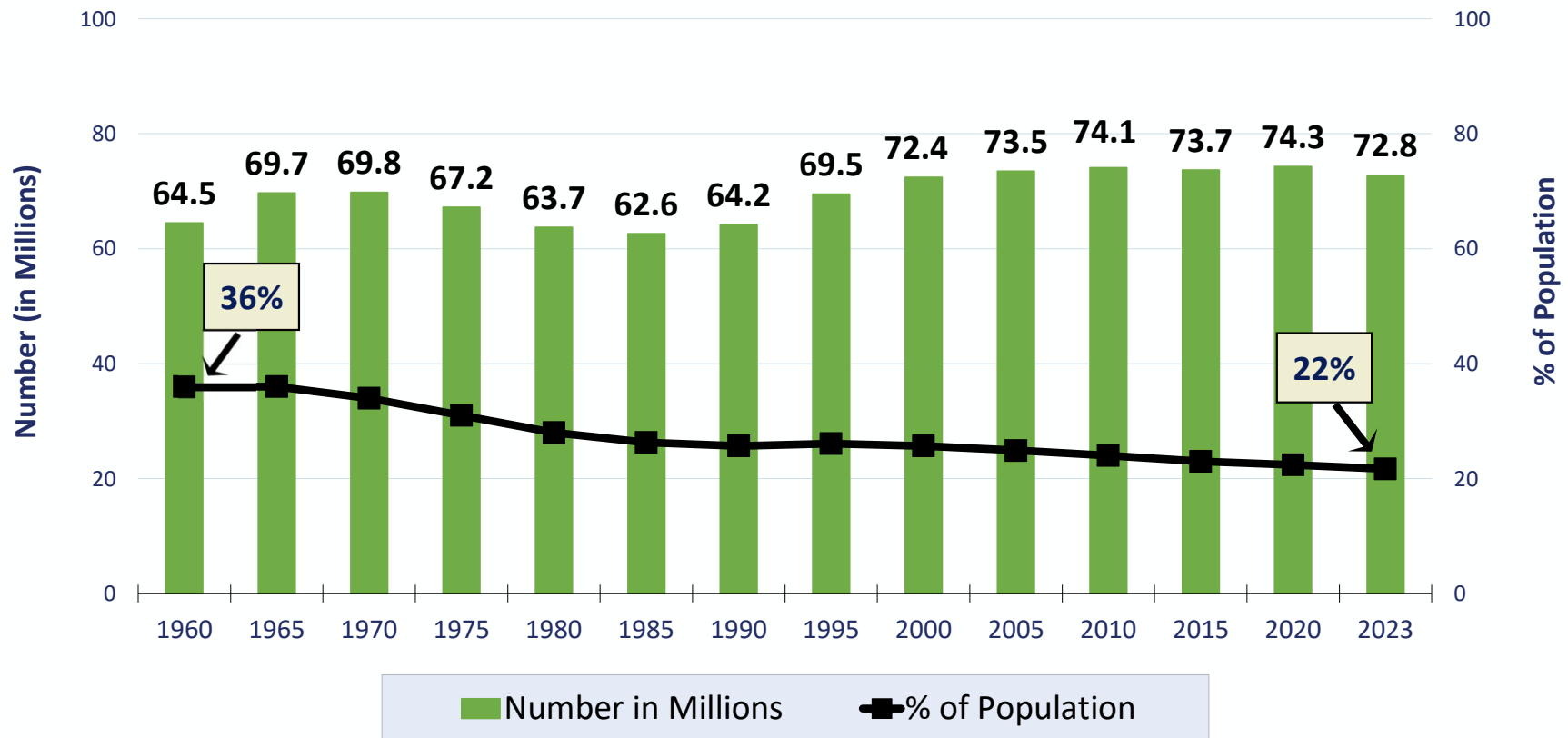
Learning Objectives

- Review the drivers shaping current delivery models
- Reimagine pediatric care delivery through a family-centered lens
- Explore the impacts of moving from transactional to relational healthcare delivery

What's Driving Our Pediatric Healthcare Delivery?

- Who and where are the children?
- How is pediatric healthcare financed?
- How is pediatric healthcare paid?
- Who and where are the pediatric clinicians?

US Child (under 18) Population: Number and % of Overall Population, 1960-2023



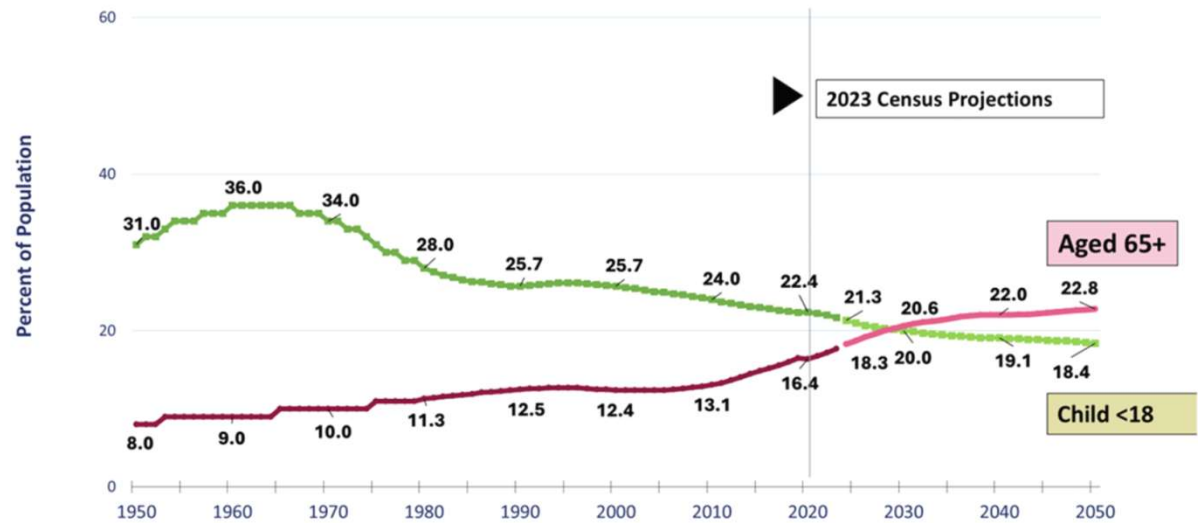
Source: US Census Bureau, Current Population Reports (<http://www.childstats.gov/americaschildren/tables/pop1.asp>, <http://www.childstats.gov/americaschildren/tables/pop2.asp>, and <https://www.census.gov/data/tables/2023/demo/popproj/2023-summary-tables.html>)



Substantial Effects of Reduced Child Population

Such as: by 2036 only 2.3 covered workers per Social Security Beneficiary (Report of Social Security Trustees 2024)

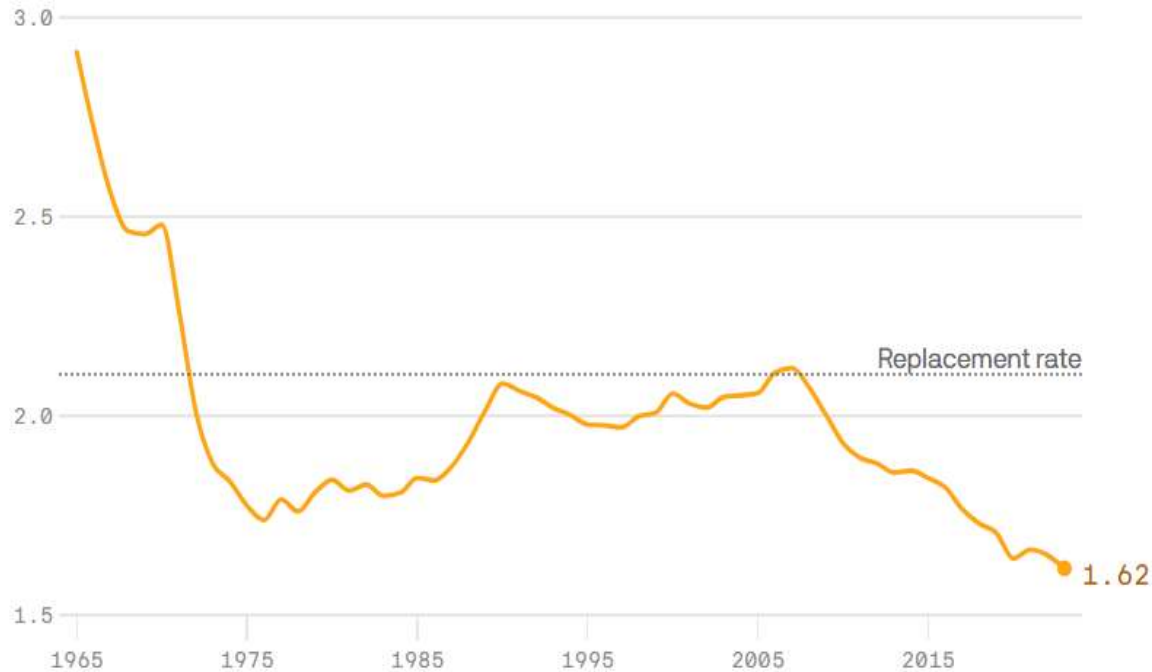
US Population: % of Overall Population by Age Group, Recorded (1950-2023) and Projected (2024-2050)



nsus Bureau, Current Population Reports (<https://www.childstats.gov/americaschildren/tables/pop2.asp>)

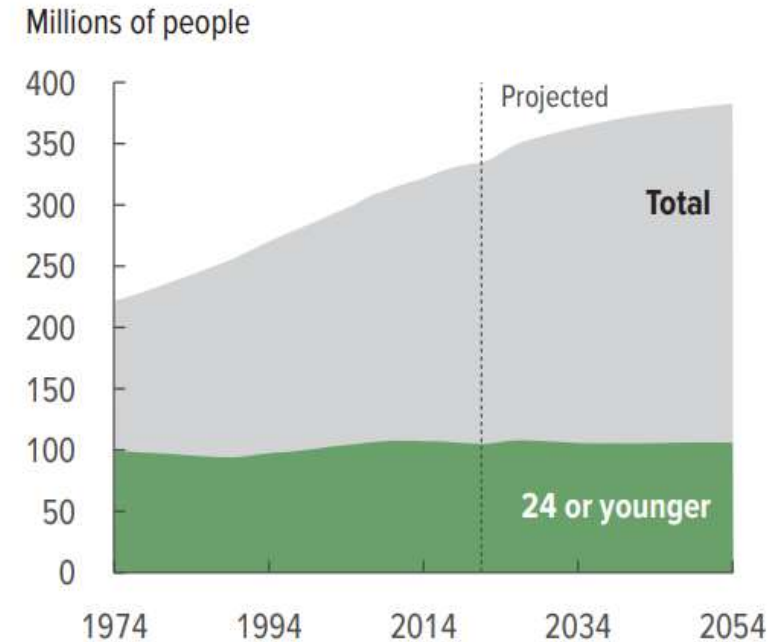
American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®

US Demographic Trends



“US fertility rates drop to another historic low.”

CDC, April 2024. DOI: <https://dx.doi.org/10.15620/cdc/151797>, Axios graph

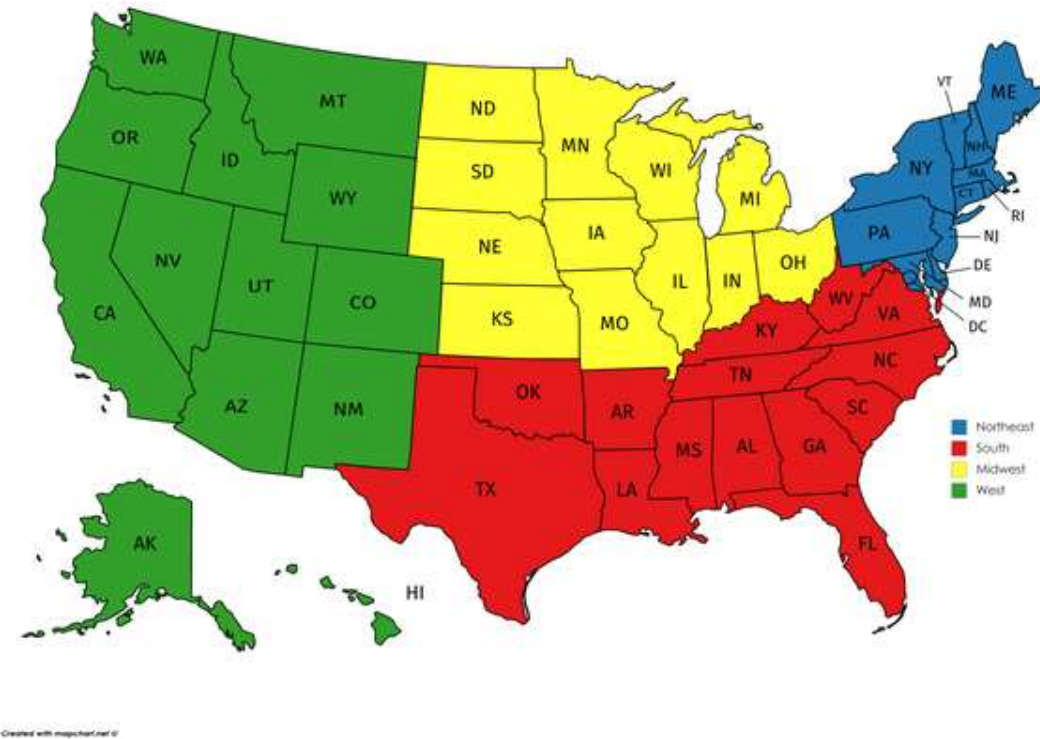


A smaller number of children will need to support a growing older population.

CBO, Jan 2024,
<https://www.cbo.gov/system/files/2024-01/59697-Demographic-Outlook.pdf>

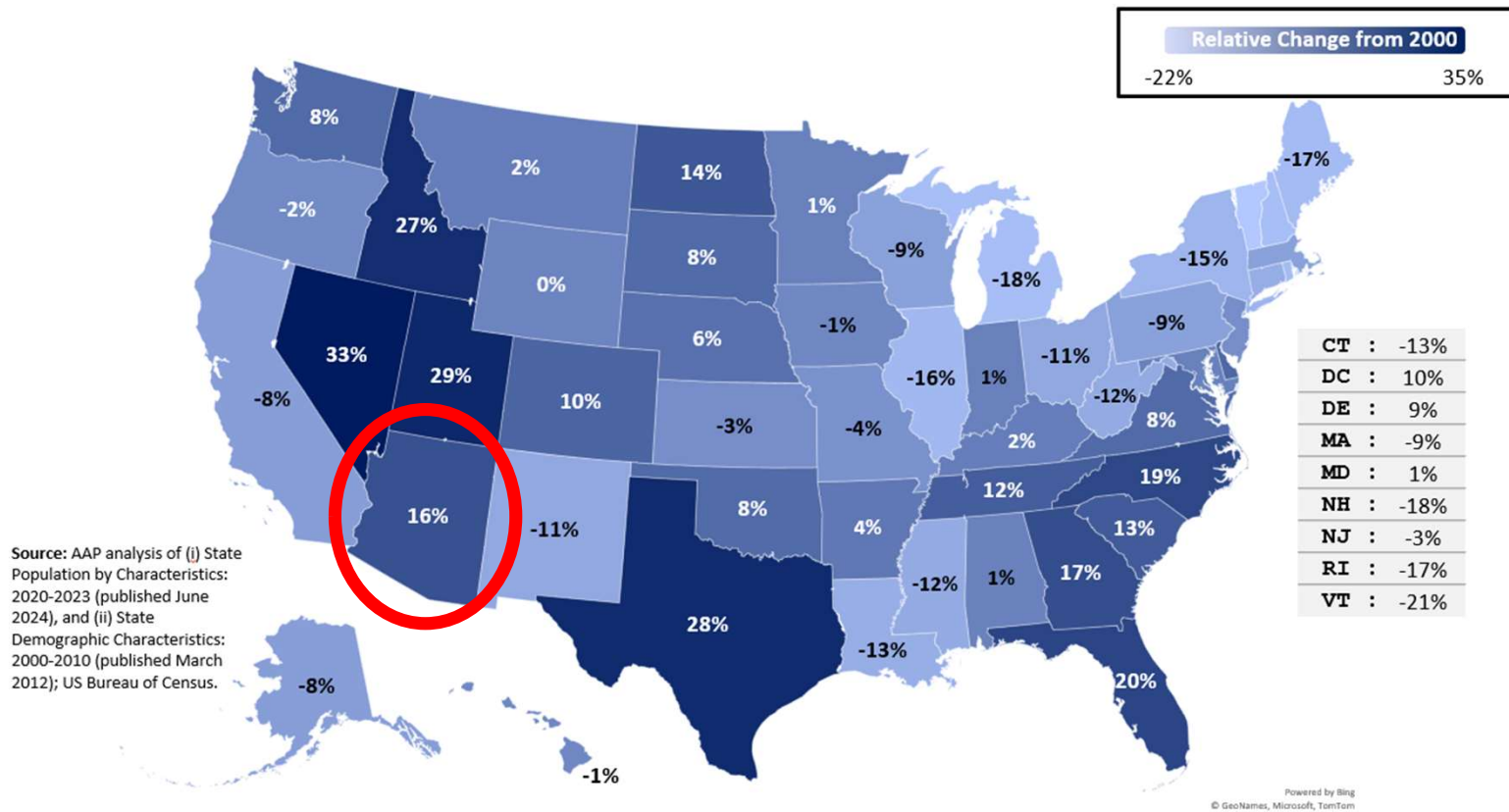
Where Do US Children Live?

% of All US Children	
Northeast	16%
Midwest	21%
South	39%
West	24%

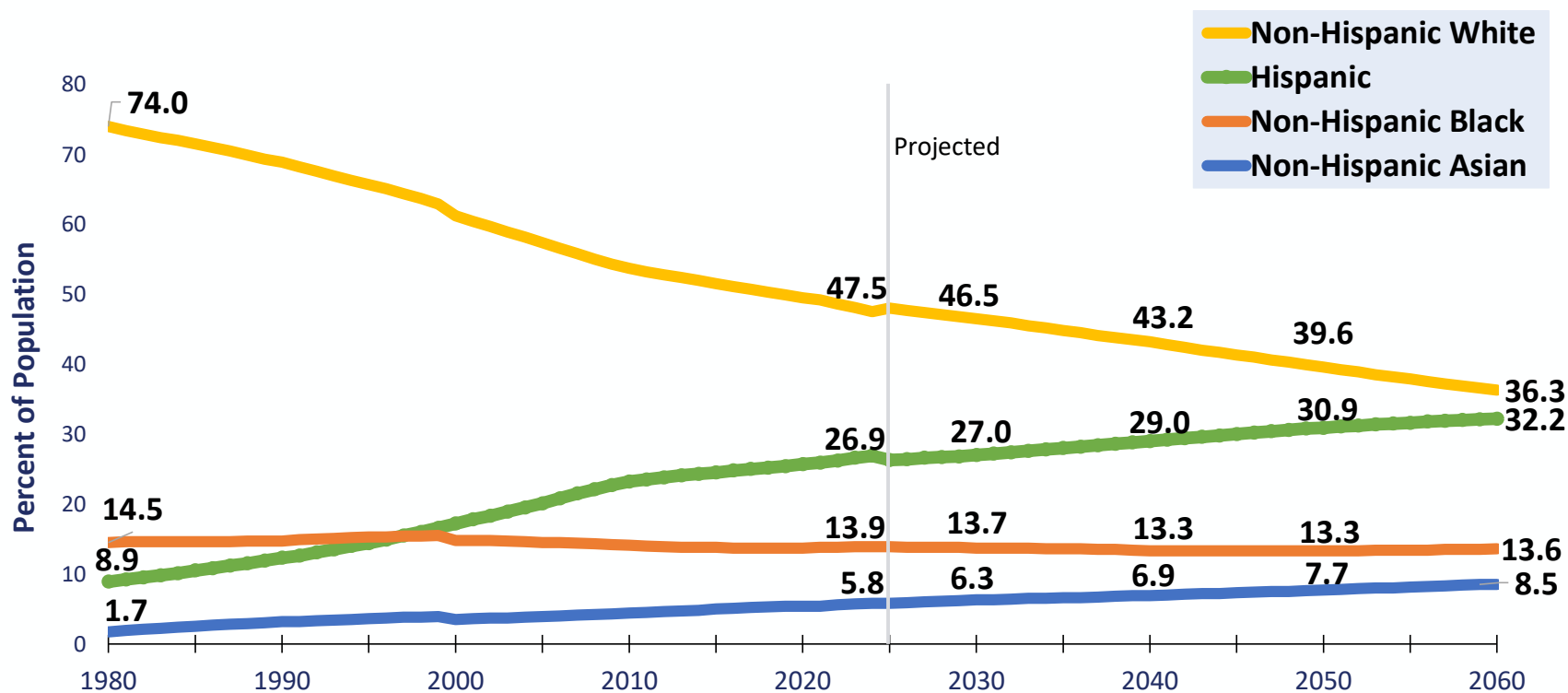


Source: US Census Bureau, Current Population Survey, Annual Social and Economic Supplement
(<https://www.census.gov/data/datasets/time-series/demo/cps/cps-asec.html>)

Child Population through Age 18: Within State Increase or Decrease in Number from 2000-2023



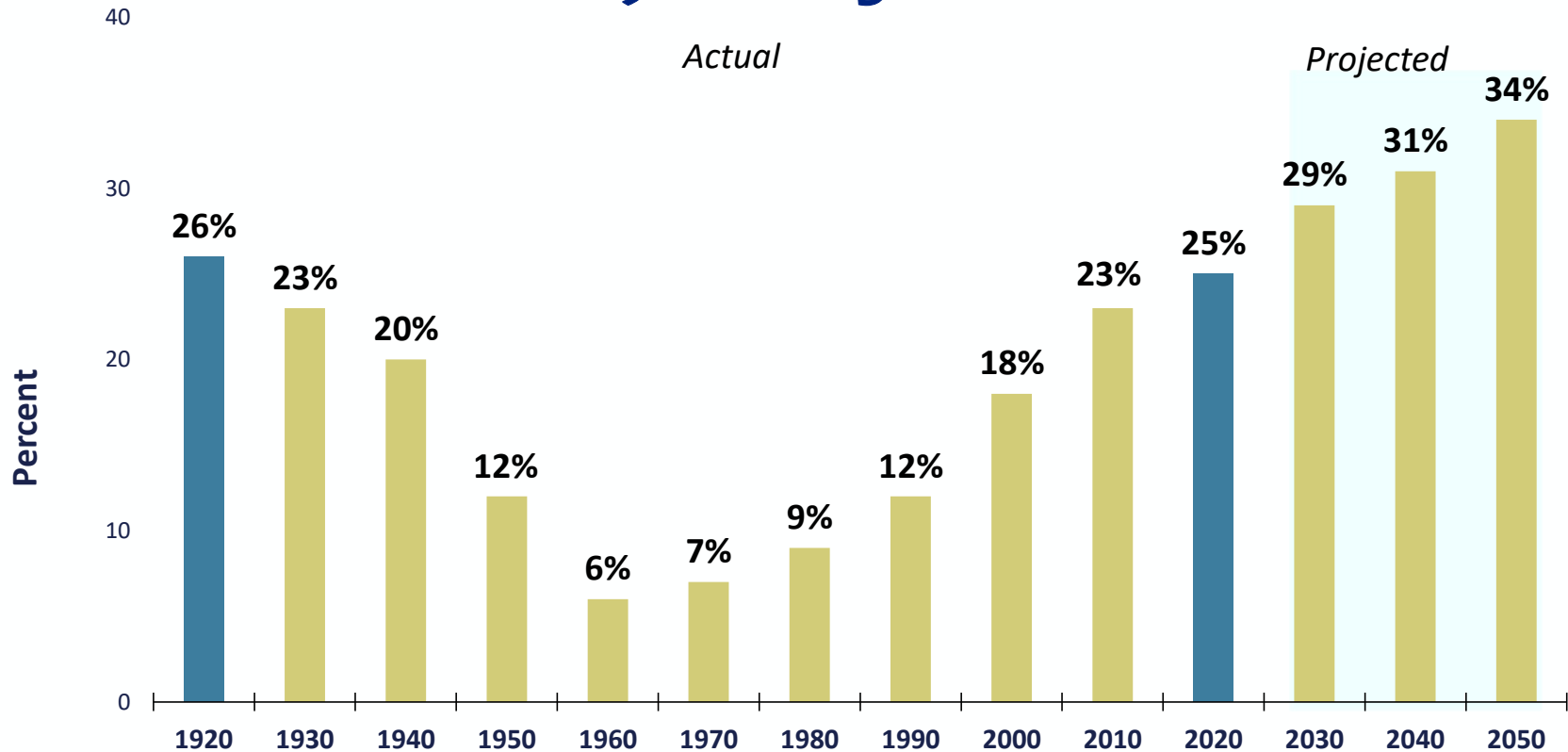
Increasing Diversity: Race and Ethnicity of US Children (under 18), Recorded (1980-2024) and Projected (2025-2060)



Source: US Census Bureau, Population Division (data for 1980-2019 and 2025-2060: <http://www.childstats.gov/americaschildren/tables/pop3.asp>; and 2020-2024: <https://www.census.gov/data/tables/time-series/demo/popest/2020s-national-detail.html>)



Immigrant Children as Share of All US Children, 1920–2050*



*"Immigrant children" defined as children under age eighteen who are either foreign-born or U.S.-born to immigrant parents; gray shaded region (2030-2050) refers to population projections.

Source: 1920-2000 and 2030-2050 population projections: Passel, Jeffrey. "Demography of Immigrant Youth: Past, Present, and Future."

The Future of Children, 2011; 2010-2020: US Census Bureau, Current Population Survey, Annual Social and Economic Supplement (<https://www.childstats.gov/americaschildren/tables/fam4.asp>)



Those from Immigrant Backgrounds Core to the US Pediatrician Workforce

22% - Pediatrician born outside the US

40% - Pediatricians' parent(s) born outside the US

AAP PLACES

THE OFFICIAL NEWSMAGAZINE OF THE AMERICAN ACADEMY OF PEDIATRICS

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®

www.aapnews.org

Volume 45 • Number 3 • March 2024

Research Update

PLACES
Pediatrician Life and Career Experience Study
A program of the American Academy of Pediatrics

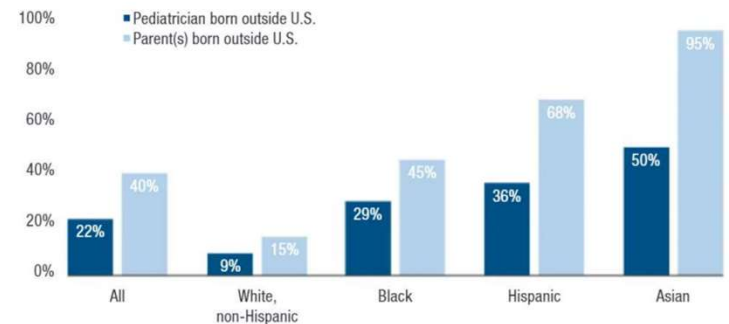
Survey highlights pediatricians' international backgrounds

from [AAP Research](#)

A growing portion of pediatricians' patients are immigrant children, with nearly one-quarter of U.S. children either born or having a parent who was born outside the country. Less is known about what portion of pediatricians have international backgrounds.

Surveys of 2,425 participants in the AAP Pediatrician Life and Career Experience Study (PLACES) show that pediatricians have

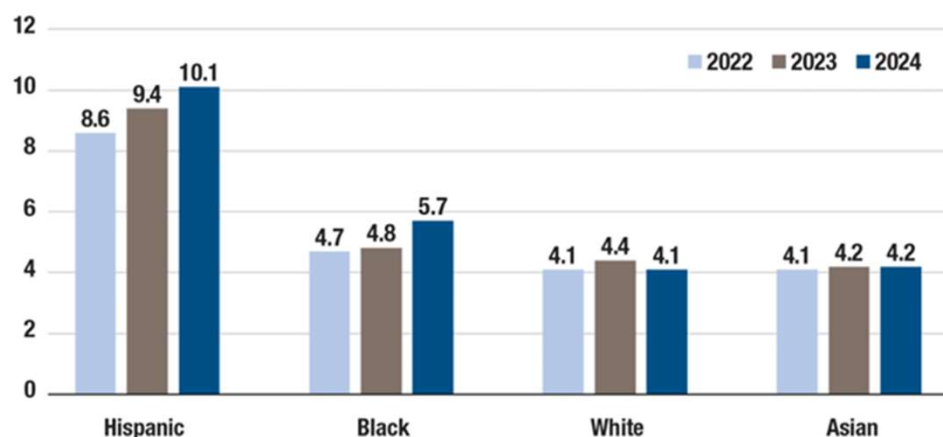
Percent of PLACES pediatricians or a parent born outside the U.S.



Research Update

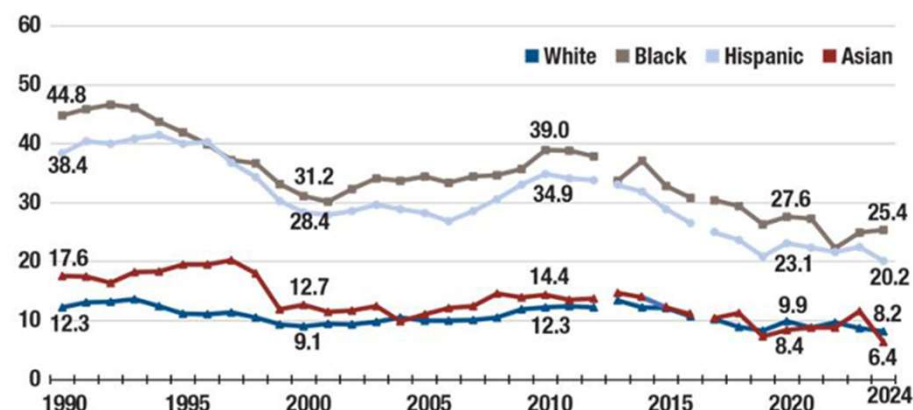
Disparities in child poverty and uninsurance persist

Percent of children (ages 0-18) uninsured for entire year by race and ethnicity



Source: U.S. Census Bureau, Current Population Survey, 2022-2024

Percent of U.S. children (under 18) living below official poverty level by race and ethnicity, 1990-2024*



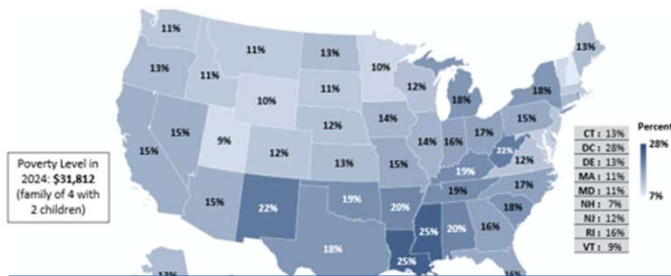
*Due to redesigned income questions in 2013 and updated processing system in 2017, estimates for 2013-2016 and 2017-2024 are not directly comparable to respective previous years.

Poverty level in 2024: \$31,812 (family of four with two children)

Source: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement

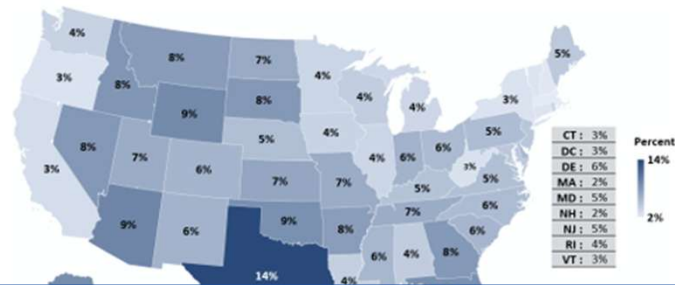
Diversity of US Children by State, 2024

Children (<18) in Families Below the Poverty Level



AZ: 15%

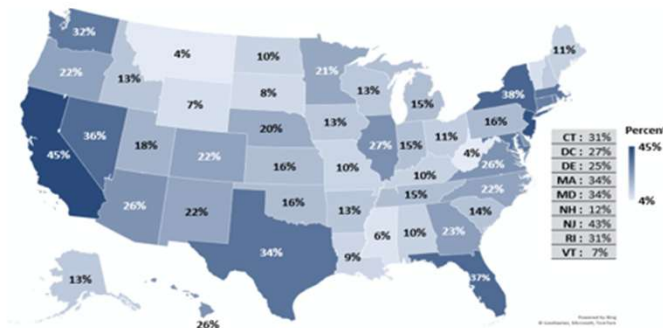
Children (<19) Without Health Insurance



AZ: 9%

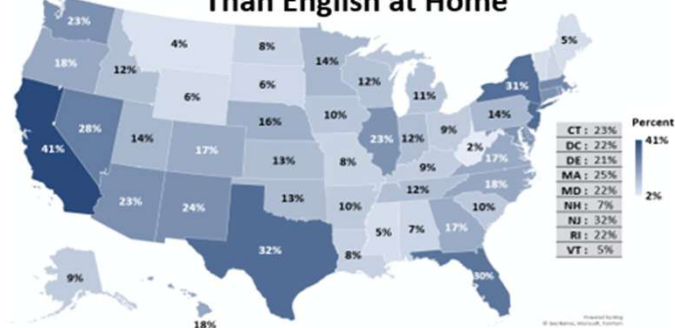
In 2024, the demographics of Arizona's pediatric population was represented by 44% of children who identified as Hispanic or Latino.

Children (<18) in Immigrant Families



AZ: 26%

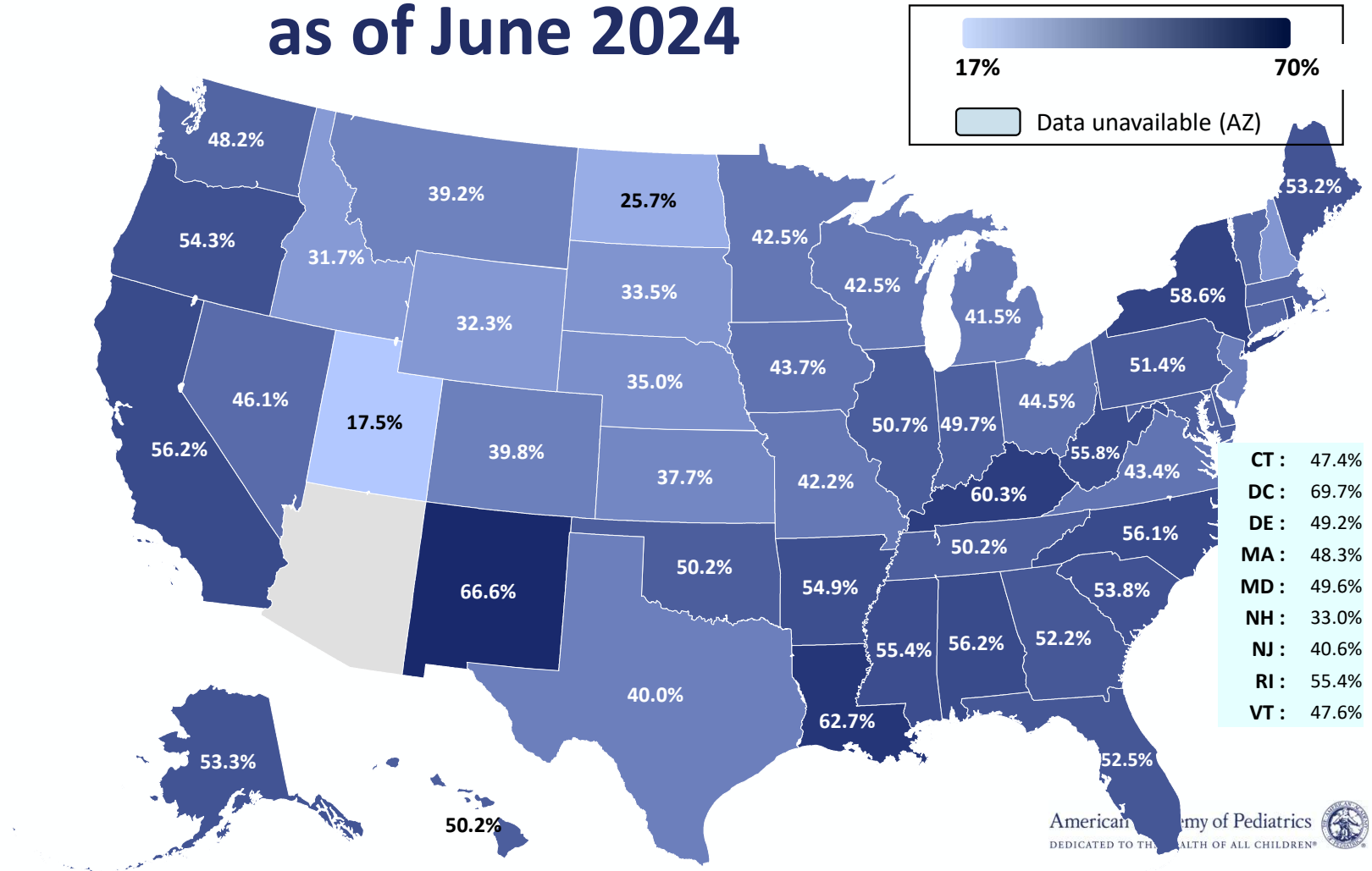
Children (5-17) Who Speak a Language Other Than English at Home



AZ: 23%

Source: US Census Bureau, American Community Survey. Maps can be found at <https://www.aap.org/research>, Child health data trends. Comparable data regarding US Territories is not available.

Percentage of State Children Enrolled in Medicaid/CHIP as of June 2024



Source: AAP analysis of data submitted by states to CMS released through the Medicaid and the Children's Health Insurance Program (CHIP) Performance Indicator Projects

Notes: CMS reports of Medicaid/CHIP enrollment based on state administrative data has been generally higher than estimated by national surveys.

Medicaid is Vital to Arizona's Children

Medicaid, or Arizona Health Care Cost Containment System (AHCCCS), is a public health insurance program designed to help people who otherwise could not afford health coverage.

Medicaid is a lifeline to children and families in Arizona and is built with children's unique needs in mind.

38% of people enrolled in AHCCCS in Arizona are children

38%



Medicaid pays for 46% of Arizona births

Helps ensure access to critical prenatal care, maternity care, and postpartum services.



Medicaid covers 41% of all Arizona children

Insures children in low-income families and nearly all children in foster care.



Medicaid covers 57% of children in Arizona with special health care needs

Provides medical, behavioral health, and long term care for children with special health care needs and disabilities.



Medicaid is the largest source of federal funding for mental health services

Supports mental and behavioral health treatment for children, adolescents, and adults.

AHCCCS IS VITAL TO ARIZONA'S CHILDREN



The federal government contributes \$1.80 to Medicaid for every \$1 Arizona invests.

74%

74% of federal funding sent to Arizona is for Medicaid, which is about \$19.3 billion annually.

<https://www.aap.org/en/advocacy/childrens-health-care-coverage-fact-sheets>

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®

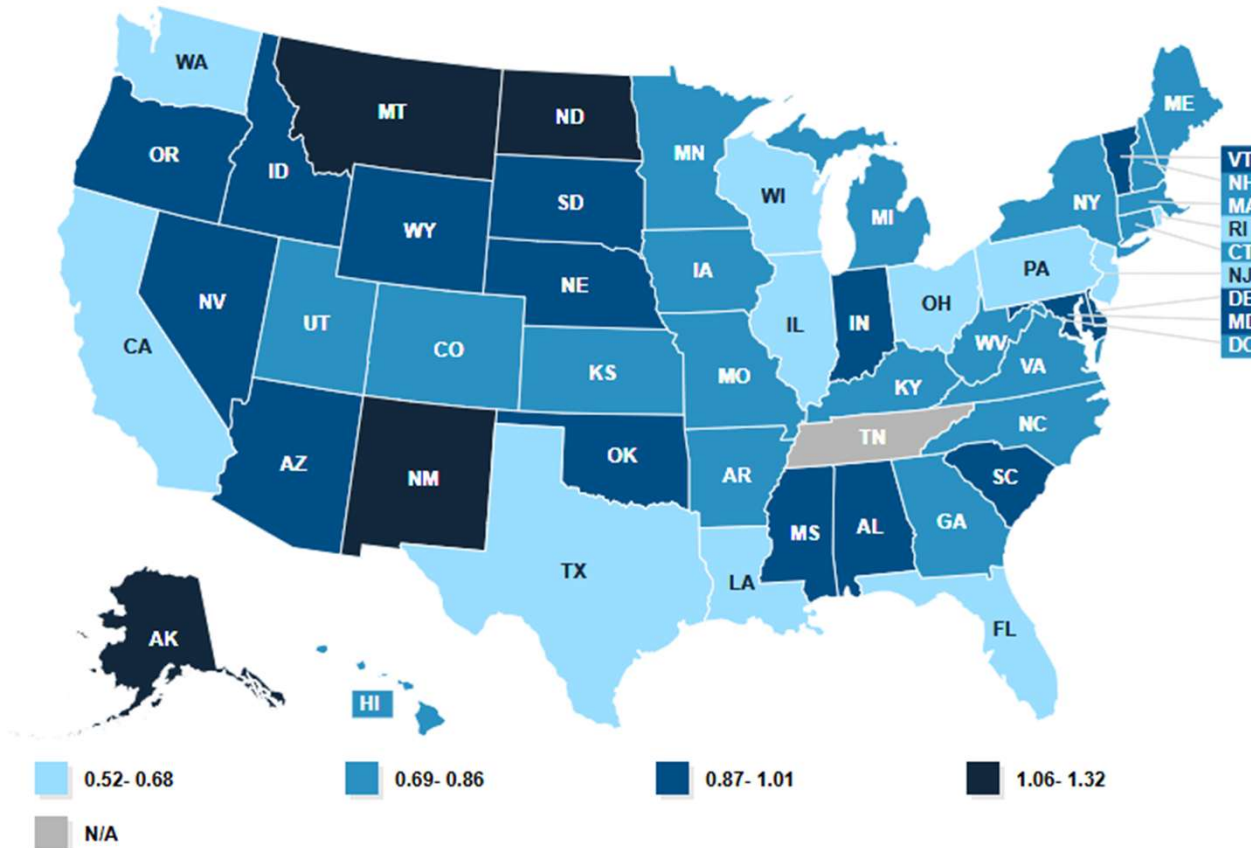




Current State of Pediatric Payment



Medicaid to Medicare Fee Index



AZ

Primary care: 0.76

All services: 0.98

Primary Care:

IL: 0.47 – Montana 1.32

USA: 0.66 (was 0.67 in 2019)

<https://www.kff.org/medicaid/state-indicator/medicaid-to-medicare-fee-index>





<https://www.nationalacademies.org/our-work/improving-the-health-and-wellbeing-of-children-and-youth-through-health-care-system-transformation>

Child Health Financing and Payment

- ALL pediatric clinical team members are underpaid compared to adult medicine
 - >50% of children in this country are covered by Medicaid/CHIP
 - Current CPT/RVU structure rewards procedures, not thinking
 - AMA E/M changes increased pay to primary care for adults, but not children
- Health insurance is designed to amortize risk of catastrophic events over populations



The Current Child Health Landscape

U.S. faces a crisis with poor and worsening child health and wellbeing with impacts on the workforce of the future

U.S. ranks at the bottom among wealthy nations on mental wellbeing, physical health, and academic and social skills

Children living in poverty and from marginalized groups all face poorer health and higher rates of mental health conditions

Increased incidence of chronic diseases, though many conditions are preventable

Increases in mortality and morbidity, mental health conditions, obesity and cardiovascular and pulmonary disease, substance use among working-age adults with roots in childhood



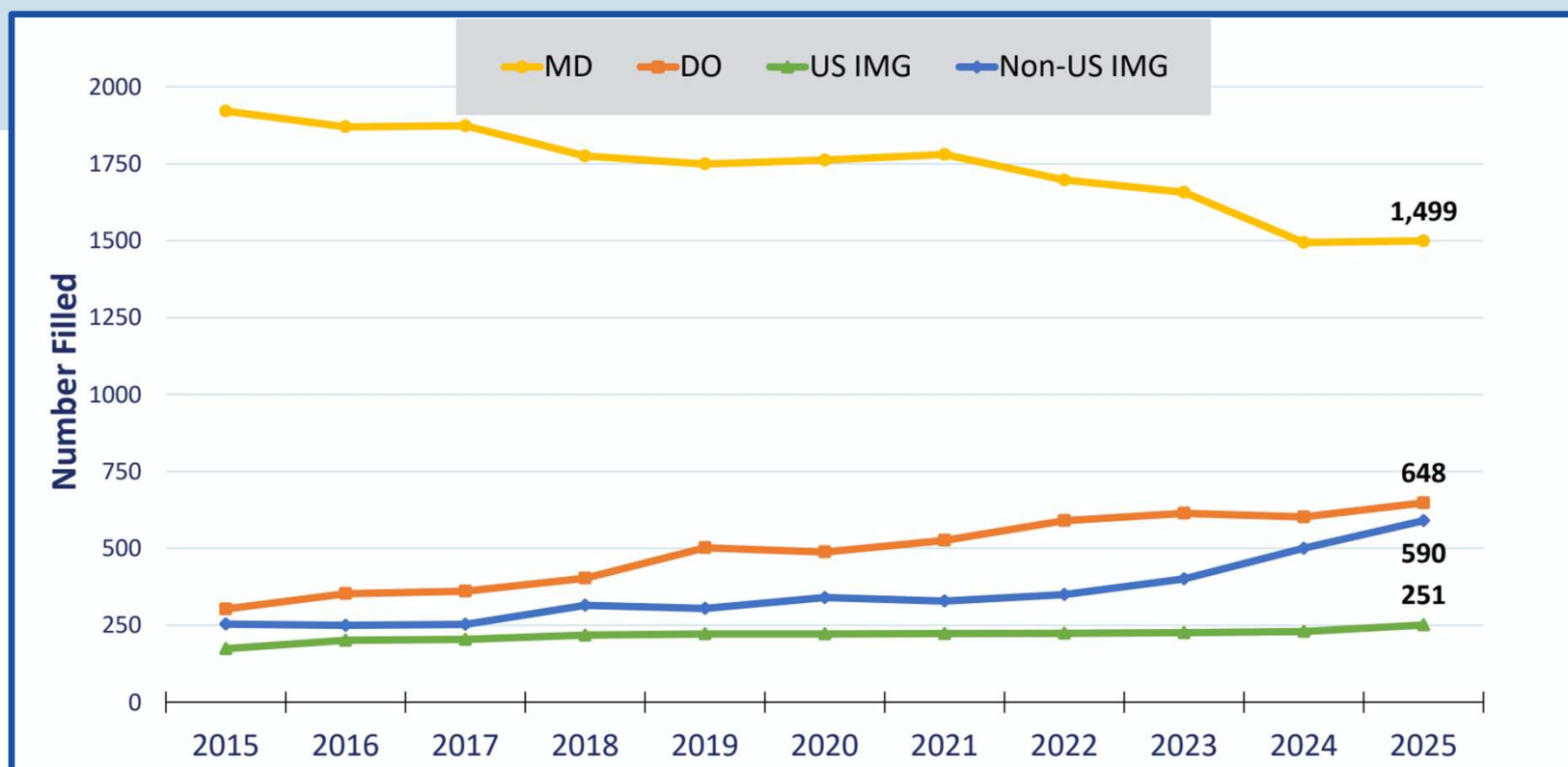
77 Percent of American Youth Can't Qualify for Military Service

Better nutrition and physical activity can yield healthier outcomes for youth and bolster national security

<https://www.strongnation.org/articles/2006-77-percent-of-american-youth-can-t-qualify-for-military-service> January 24, 2023

<https://www.strongnation.org/articles/2288-we-need-all-that-they-can-be> December 11, 2023

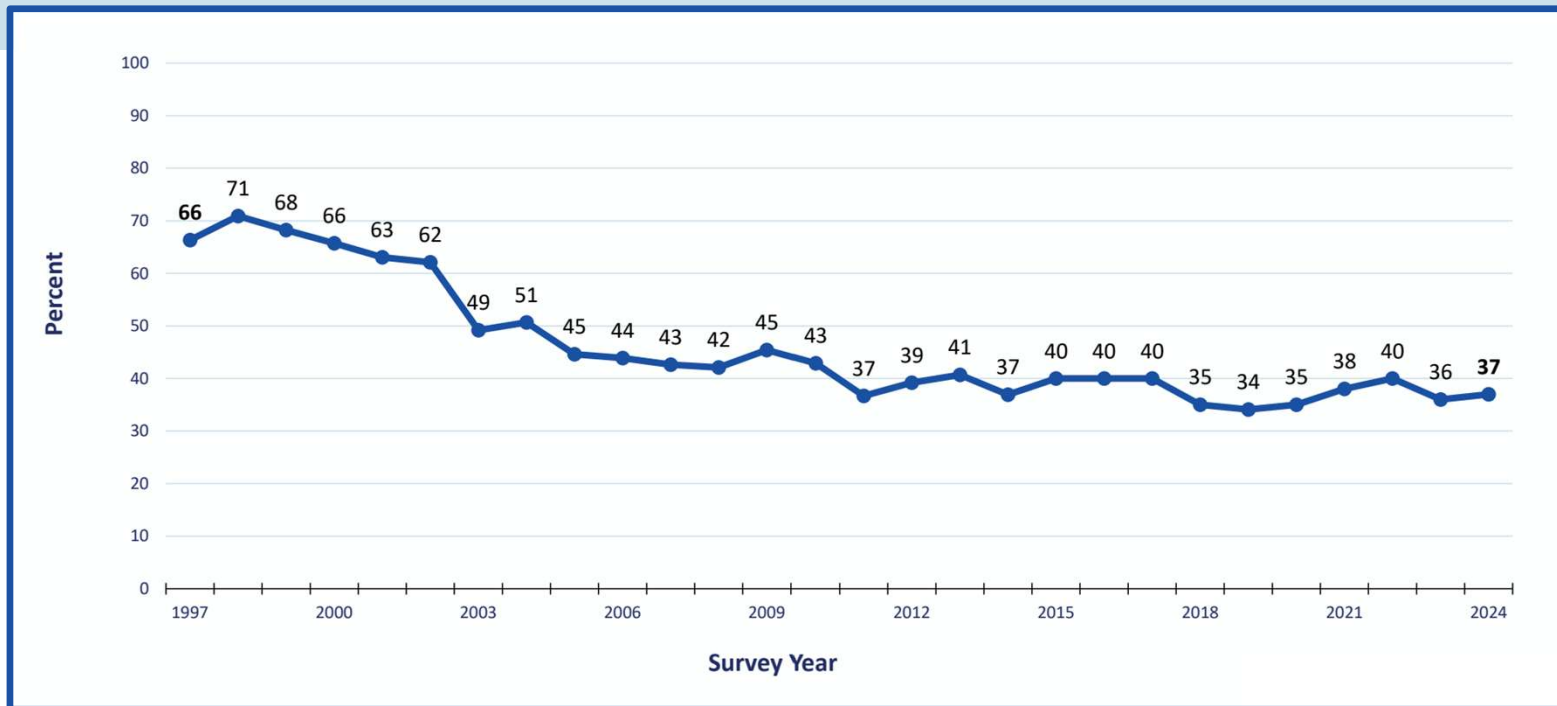
Who is filling pediatric positions? (2015-2025)



Source: https://www.nrmp.org/data-topic/results-and-data/?post_type=match-data



Percent of graduating pediatric residents whose future clinical practice goal is primary care



Source: AAP Annual Survey of Graduating Residents, 1997-2024



In 2024 What do Primary Care Pediatricians Say?

% Reporting there are too few pediatric subspecialists to meet the needs of patients in their practice community

Child/adolescent psychiatry	97%
Developmental-behavioral pediatrics	96%
Pediatric dermatology	76%
Child abuse pediatrics	76%
Pediatric rheumatology	75%
Adolescent medicine	73%
Pediatric neurology	67%
Pediatric genetics	66%
Sleep medicine	65%
Pediatric endocrinology	61%
Pediatric nephrology	56%
Pediatric ophthalmology	55%
Pediatric gastroenterology	52%
Hospice and palliative medicine	51%

Source : AAP Periodic Survey, 2024



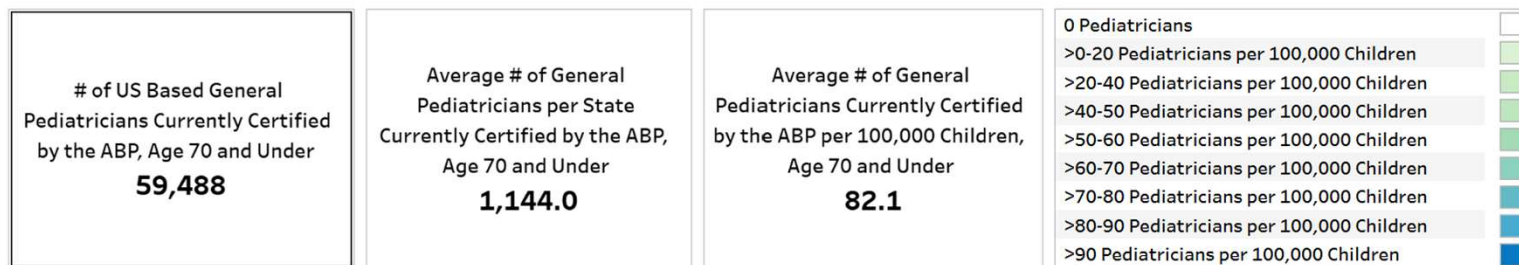
In 2024 What do Primary Care Pediatricians Say?

% Reporting there are too few pediatric subspecialists to meet the needs of patients in their practice community

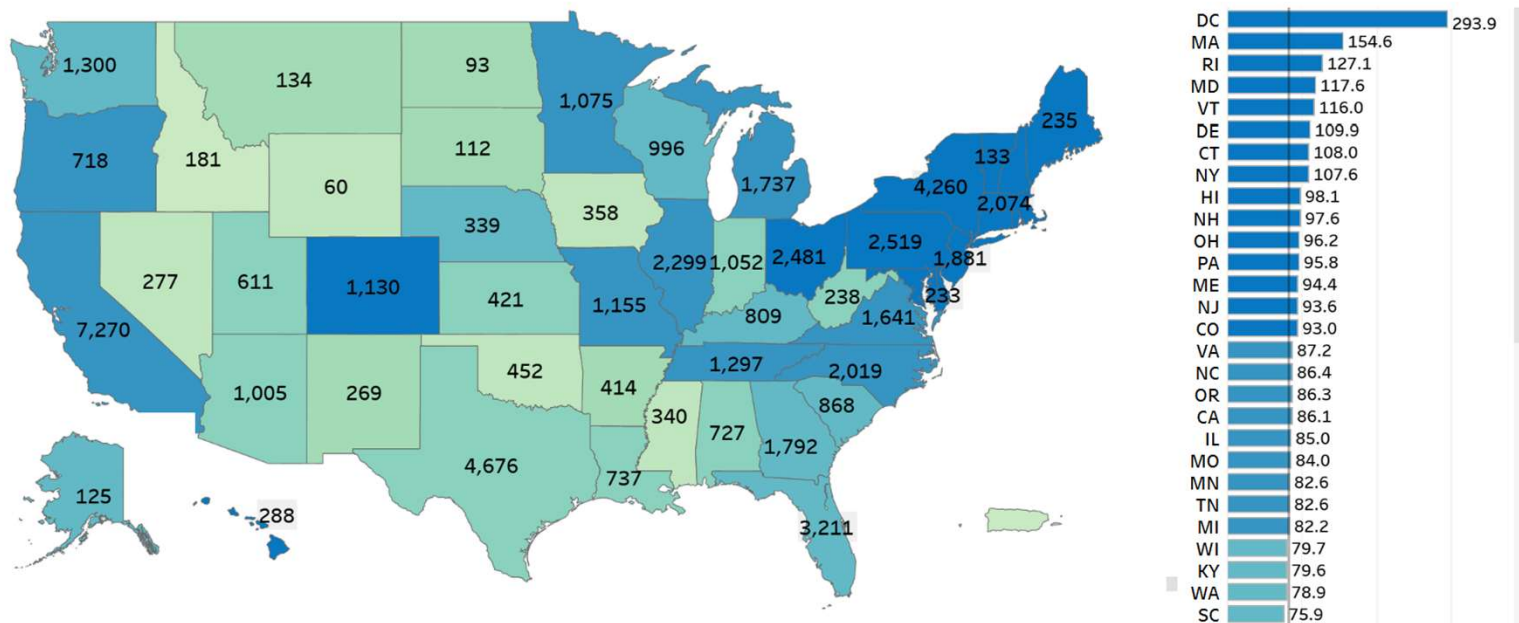
Pediatric pulmonology	51%
Pediatric allergy and immunology	49%
Pediatric infectious diseases	45%
Pediatric otolaryngology	44%
Pediatric urology	41%
Sports medicine	38%
Pediatric emergency medicine	37%
Pediatric orthopedics	30%
Pediatric surgery	28%
Pediatric hematology-oncology	28%
Pediatric critical care medicine	24%
Pediatric cardiology	24%
Pediatric hospital medicine	22%
Neonatal-perinatal medicine	15%

Source : AAP Periodic Survey, 2024





Distribution of the combination of those certified in General Pediatrics (alone) and those certified in both General Pediatrics and in another ABMS specialty by pediatrician count

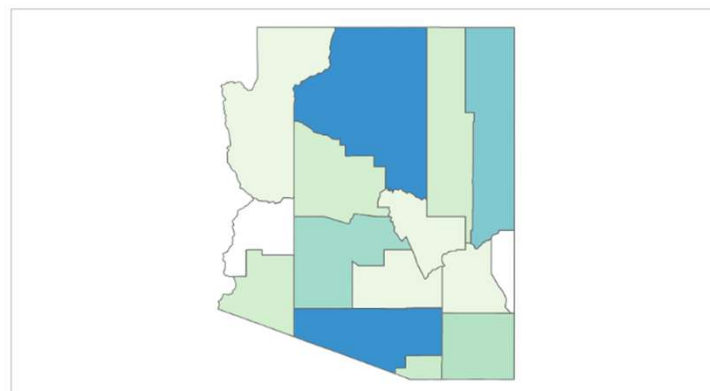


Arizona State and County Specific Data

State Selection (or select the state in map above)

Arizona

Pediatrician Count	1,005
Total under 18	1,583,034
Per 100,000 Children	63.50
Children per Pediatrician	1,575



	Pediatrician Count	Total under 18	Per 10,000 Children	Per 100,000 Children	Children per Pediatrician
Apache County	12	16,671	7.2	72.0	1,389
Cochise County	13	25,421	5.1	51.1	1,955
Coconino County	31	27,607	11.2	112.3	891
Gila County	2	10,035	2.0	19.9	5,018
Graham County	2	10,416	1.9	19.2	5,208
Greenlee County	0	2,511	0.0	0.0	
La Paz County	0	2,554	0.0	0.0	
Maricopa County	690	1,013,496	6.8	68.1	1,469
Mohave County	6	35,835	1.7	16.7	5,973
Navajo County	7	27,120	2.6	25.8	3,874





Reimagining Pediatric Healthcare Delivery



Putting the CARE back in Healthcare

- “We have focused on building bigger and better hospitals, training up specialists and thinking about how to effectively and efficiently treat. But that’s not where healthcare ends.”

Edith Elliot

<https://www.youtube.com/watch?v=tEKw3kwqGDw>

- Bring families to the center of care!
- [Claudia Aristy](#), Director of Reach Out and Read and the HELP Project, Bellevue
- [Dr. Elayna Fernandez](#), The Positive MOM





Current Obstacles

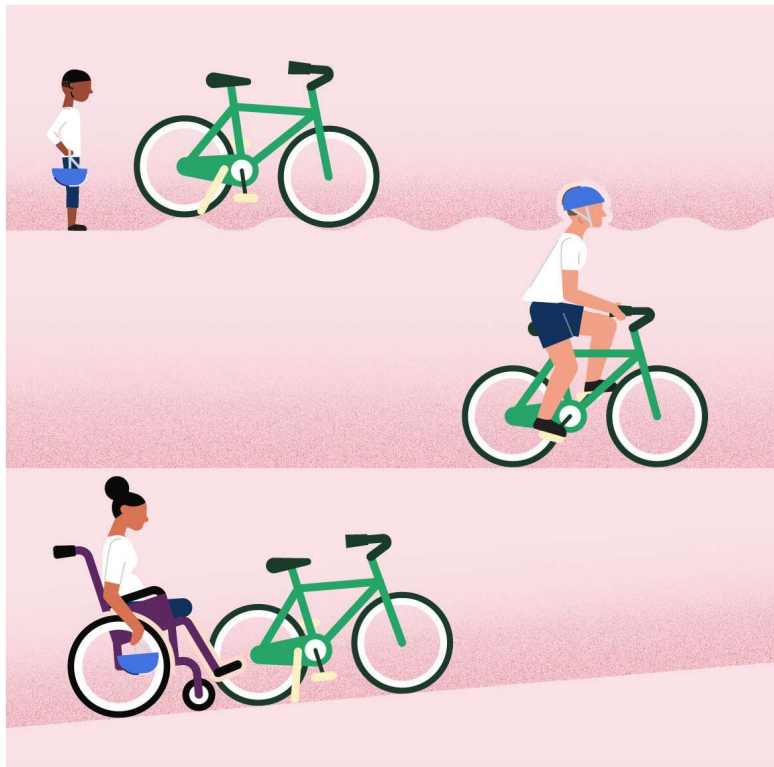
- **Inadequate payment** leads to inadequate resources to provide comprehensive care
- **Chronic underinvestment** in children with inadequate prioritization of needs
- **Increasing administrative burden** that adds no value to care
- Lack of appropriate **pediatric tools**



Equity-Centered

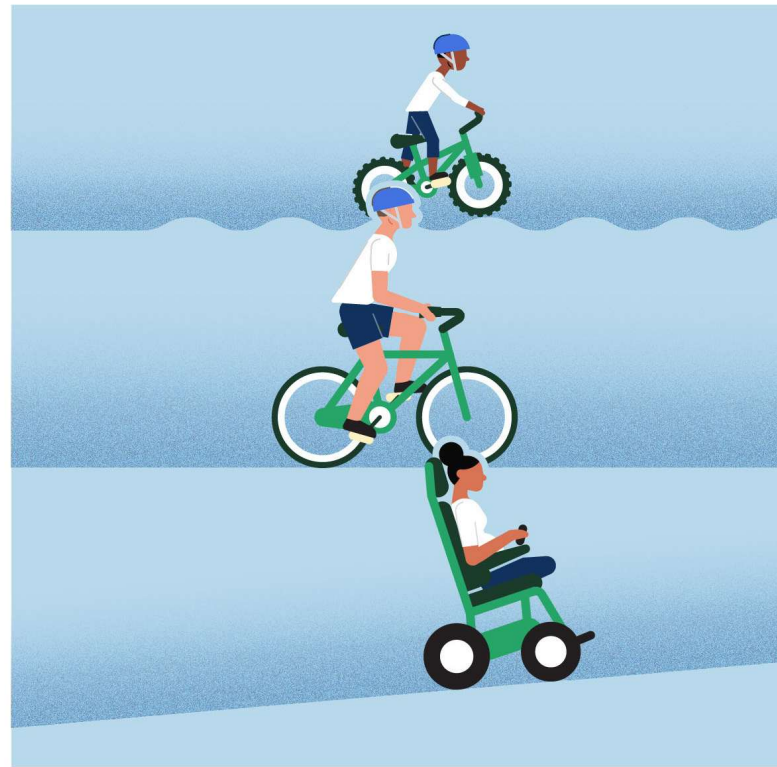
EQUALITY:

Everyone gets the same—regardless if it's needed or right for them.



EQUITY:

Everyone gets what they need—understanding the barriers, circumstances, and conditions.



Copyright 2022 Robert Wood Johnson Foundation



Diversity Matters

Belonging, Trust, Care Plans, Outcomes

Patient-Physician Racial Concordance Associated with Improved Healthcare Use and Lower Healthcare Expenditures in Minority Populations

Anuradha Jetty¹, Yalda Jabbarpour², Jack Pollack³, Ryan Huerto⁴, Stephanie Woo⁵,
Stephen Petterson⁶

Affiliations + expand

PMID: 33403653 DOI: [10.1007/s40615-020-00930-4](https://doi.org/10.1007/s40615-020-00930-4)

- Does your team reflect your patient population?
- What can you do to improve that?



Child-First Design

- Developmental trajectory model
- Context of caregivers/family
- Context of community





What Does Excellence Look Like to Families?

- **Accessibility**
 - At convenient times
 - In multiple ways
 - Without unnecessary barriers
- **Empathy/compassion**
- **Affordability**
- **Optimal Outcomes**





What Does Excellence Look Like to Pediatricians?

- **Accessibility**
 - Adequate resources
 - Adequate time
 - Technology that allows efficiency
- **Empathy/compassion**
 - Relationships are bidirectional!
- **Affordability**
 - Adequate payment to deliver the right care, at the right place at the right time
- **Optimal Outcomes** for EVERY patient



Right Care, Right Place, Right Time

- Do all of our patients need the same care to have optimal outcomes?
- What if we removed payment incentives to create true value for all?
- Could we personalize our care delivery while improving access, efficiency and outcomes?
- If a patient contacted your office with an asthma exacerbation:
 - When is a portal message or phone call enough?
 - Who would benefit from a Telehealth encounter?
 - Who needs to be seen? Where?



Who are the Right People to Deliver the Care?

- Preventive care
- Acute care
- Chronic care
- Community workers
- Healthcare team workers
- Primary care
- Specialty care





How do we Deliver that Care?

- Technology where it solves problems
 - Access
 - Efficiency
 - Culturally, linguistically appropriate
- People where they add value
 - Compassion
 - Expertise
 - Higher level thinking/curiosity





Curiosity is the engine that fuels lifelong learning

- Knowledge is cheap and getting cheaper. The value of memorization is diminished daily by the ubiquitous availability of facts. Medical school has traditionally been about memorizing vast quantities of esoteric information, but those facts are now freely available online. *Will the job of the physician will change drastically in the coming decades?*
- The internet can only answer questions that have already been asked. **Curiosity**, as a source of novelty and previously unasked questions, **will likely become more valuable** as the retention of facts becomes less.



Meeting The Needs of Our Patient Population

What might we do instead?

- **Go upstream** and deliver some care at the population/community level proactively where they have maximum impact
- **Collaborate** with others to optimize expertise and resources
- Incorporate **pediatric-specific technology tools** built to solve these problems
- Empower patients, families, and communities with tools to **promote wellness and resilience**
- Delineate what pediatricians are **uniquely qualified** to do, and work with others to do the rest



Relationships Matter!

- When a primary care physician-patient relationship is severed, patient mortality increases by 4%, emergency department visits increase by 4%, and hospital admissions increase by 3%.
- Adverse events increase with the length of the exiting primary care physician-patient relationship, suggesting that the loss of the relationship explains adverse impacts.

The value of relationships in healthcare; Journal of Public Economics: <https://doi.org/10.1016/j.jpubeco.2023.104927>





Most Important Qualities in a Physician

- 85% “*Treating me with dignity and respect*”
- 84% “*Listening carefully and being easy to talk to*”
- 81% “*Truly caring about me*”
- 27% “*Being trained at one of the best medical schools*”

***THREE TIMES** the number of patients value human connection and caring from their physician more than the prestige of the institution where the physician was trained.

*“Doctor’s Interpersonal Skills Are Valued More Than Training.” *Wall Street Journal*, September 28, 2004



BUILDING TRUST?

JUST REMEMBER

ASC-DOC

ASSESSING WHERE TO BUILD TRUST
IN 6 DIMENSIONS



The ASC-DOC Trust Model

Burchard MA, Grunberg NE and Barry ES. Toward Understanding and Building Trust for Practicing and Emerging Healthcare Professionals: The ASC-DOC Trust Model [version 1]. MedEdPublish 2020, 9:280 (doi: 10.15694/mep.2020.000280.1)





Compassion is Bidirectional

- Organizations that lead with compassion have higher employee satisfaction, less burn out/moral injury, less turnover
- Relational health isn't just for patients and families
- Our teams also want to feel seen, heard and valued





Every day you show up, is
a better day for kids.

KEEP SHOWING UP!!





Thank You!

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®

