

Pediatric Subspecialty Physician Workforce: A Growing Crisis

CHILDREN'S Specialty Care Coalition

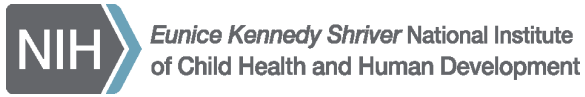
Putting California's Children First

NASEM Study 2023

Pediatrics 2025:

The AMSPDC Workforce Initiative

Pediatrics 2025: The AMSPDC Workforce Initiative Organizational Partners (2020……2025)



National Pediatric Physician-Scientist Collaborative Workgroup

Pediatrics 2025: The AMSPDC Workforce Initiative
www.amspdc.org/workforce

@AMSPDC
#Peds2025Workforce

Outline for Discussion

1. Why invest in pediatric health care and pediatric subspecialists?
2. Background data on the match and salary analysis
3. NASEM study findings and recommendations on the pediatric subspecialty workforce

Why Invest in Pediatric Health Care?

1. Children are our future
   - A growing number of adult diseases have their onset during childhood.
   - Improving care to children will decrease overall health care costs and lead to healthier adults who contribute positively to society.
2. Children now face many risks
   - High rates of poverty; children remain the poorest subgroup in the US.
   - Childhood adversity leads to poor health outcomes.
   - Children are uniquely vulnerable to health disparities related to race and socioeconomic status.
   - Children's mental health is in crisis.
3. Children have been long-ignored by a health care system that has prioritized adults with chronic disease, often without any meaningful impact on adult outcomes

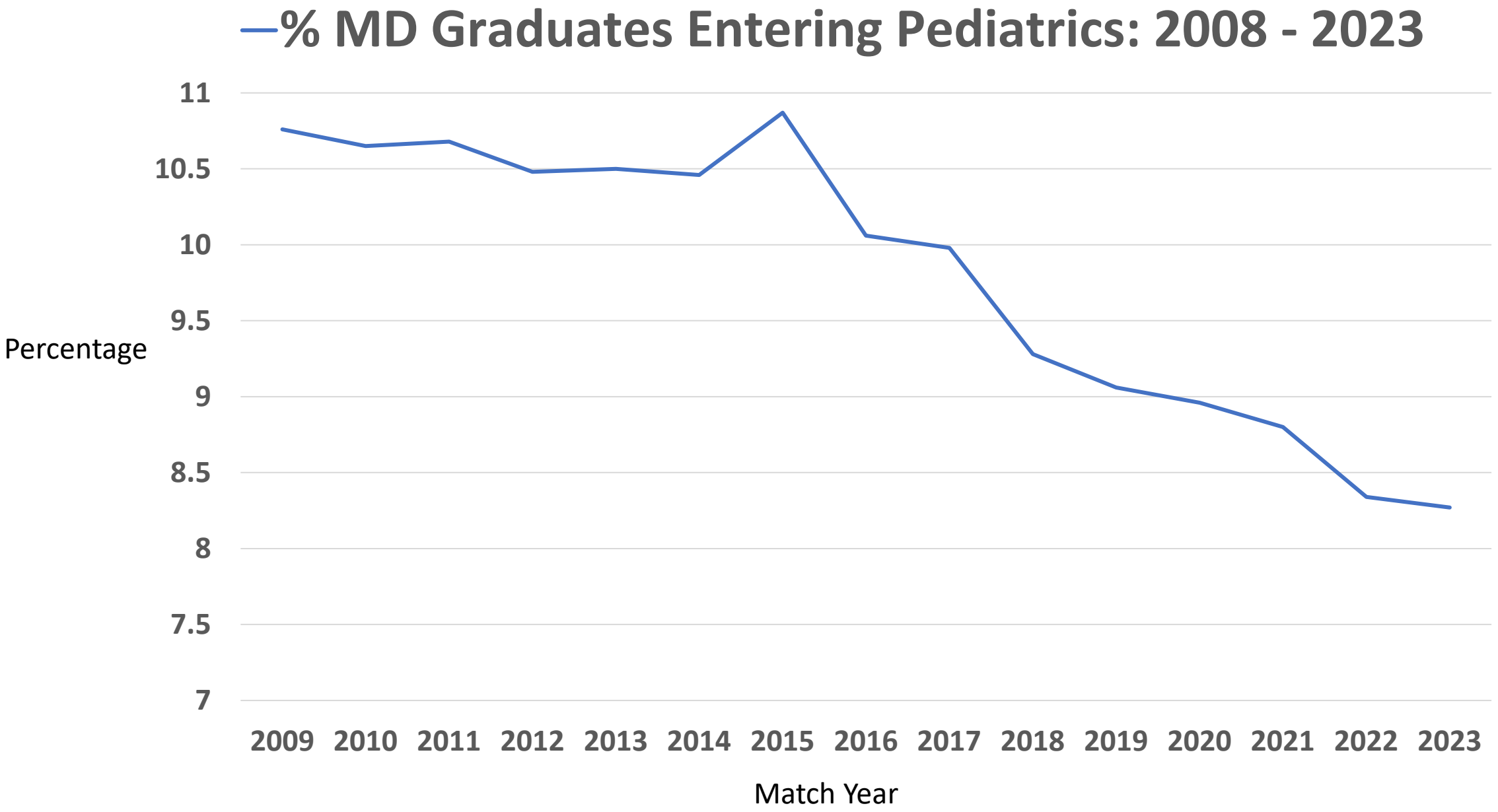
Why Invest in Pediatric Health Care?

4. Growing sophistication in diagnosis and treatment of pediatric diseases
   - Genetic testing, genome sequencing
   - Proteomics, transcriptomics, metabolomics
   - Microbiome analysis
5. Increasing ability to provide curative therapy for pediatric disease
   - Cell and gene therapy
   - Bone marrow transplantation
   - Other precision therapeutics
6. Increasing capacity to provide holistic care to children and families

Why Invest in Pediatric Subspecialists?

1. Pediatric subspecialists play a critical role in delivering state-of-the-art care to children and adolescents.
2. 10-20% of the nation's children receive care from a pediatric specialist with more than one-third (38%) of children and adolescents having at least one chronic health condition.
3. Pediatric subspecialists pursue research essential to advancing child and adolescent health.
4. Care provided by non-pediatric subspecialists leads to poor health outcomes.
5. Many patients live in areas of the state where there is little access to subspecialty care.
6. Many subspecialties report long wait times for appointments, leading to treatment delays.

Background Data



- **Factors Influencing Medical Students' Career Choice to Pursue Pediatrics: Azok JG et al, JPEDS 265; 1-5-, 2024**
- **Pursuing a Career in Pediatrics: Intersection of Educational Debt and Race/Ethnicity: Orr C et al; J Pediatr2023;252:162-70**

Medical Student Applicants to Pediatrics
ERAS Data Show a Steady Decline

	2019	2020	2022	2023	2024	
MD	2124	2204	2095	2058	1831	13.5% ↓
IMG	2125	2087	1940	1806	1769	16.8% ↓
DO	652	645	774	787	739	
Total	4951	4936	4809	4651	4379	11.5% ↓

Pediatric subspecialty fellowships with fewer applicants than positions in 2024 cycle

- Adolescent Medicine
- Cardiology
- Child Abuse
- Critical Care Medicine
- Developmental Pediatrics
- Emergency Medicine
- Endocrinology
- Gastroenterology
- Hematology/Oncology
- Hospital Medicine
- Infectious Diseases
- Nephrology
- Neonatology
- Pulmonology
- Rheumatology

Pediatric Subspecialties Applicants per Position in 2024

Specialty	# Applicants ERAS 2024	Positions in NRMP 2024	Applicants Per Position - 2024	2023 Applicants Per Position	
Hospital Medicine	133	124	1.07	1.17	**More than 1 applicant per position**
Cardiology	184	179	1.03	1.08	
Critical Care	211	224	0.94	1.09	
Neonatal	278	302	0.92	1.04	**Approximately 0.9 applicants per position**
Emergency	207	227	0.91	1.12	
Adolescent Medicine	28	34	0.82	0.74	
Gastroenterology	93	125	0.74	1.12	
Hematology/Oncology	129	184	0.70	0.89	
Rheumatology	32	52	0.62	0.72	
Endocrinology	62	100	0.62	0.65	
Pulmonology	51	86	0.59	0.72	**Less than 0.9 applicant per position**
Nephrology	41	73	0.56	0.62	
Child Abuse	12	21	0.57	0.65	
Developmental Peds	28	49	0.57	0.69	
Infectious Disease	36	77	0.47	0.62	

Applicant data is based on # of applicants who prefer that specialty from the preliminary 2024 NRMP Data. Results are compared to the 2023 Final NRMP Data.

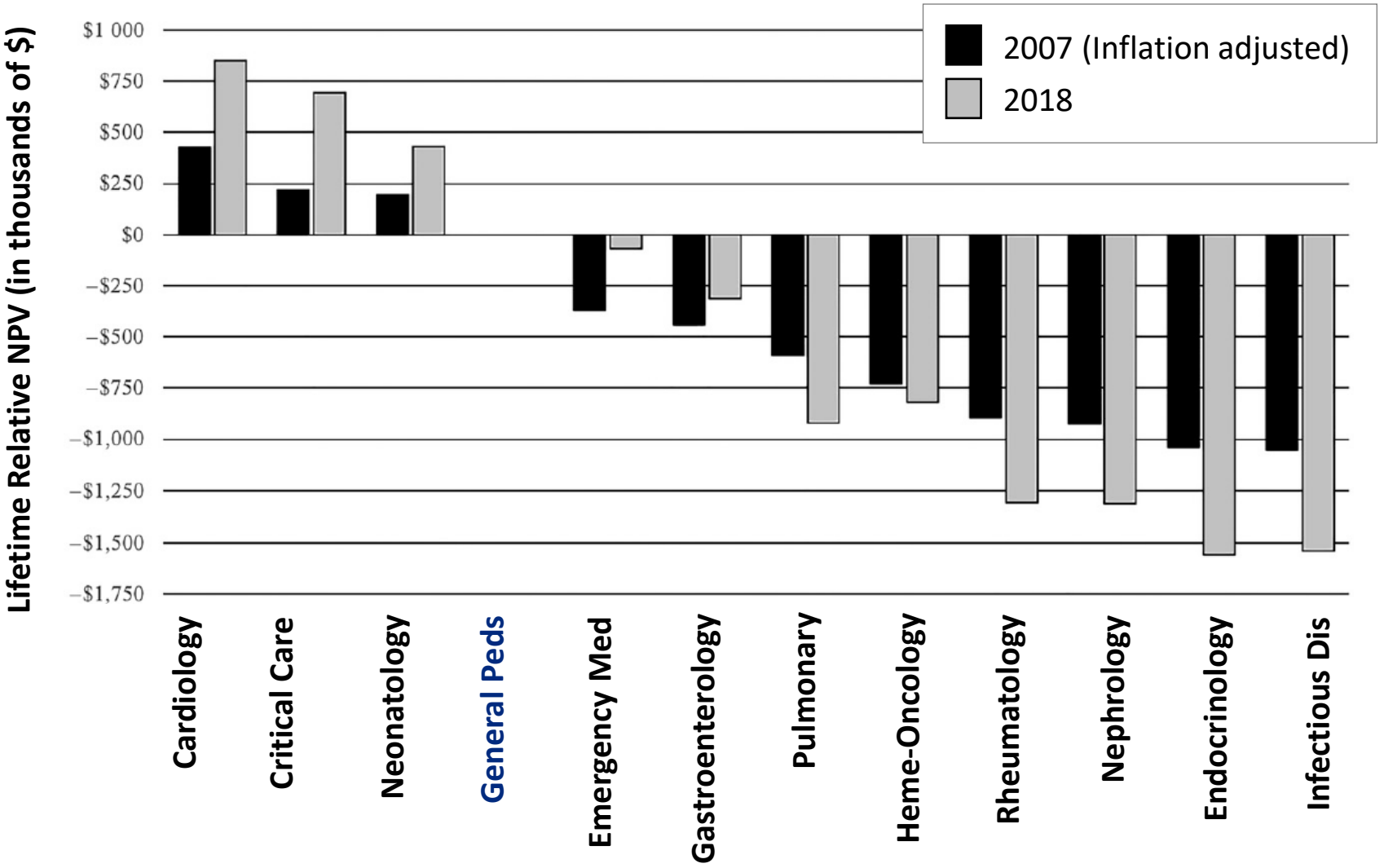
Pediatric subspecialty fellowship match results: 2023 vs. 2024

	2023	2024
Total positions filled	1536	1487
MD graduates	946 (61%)	899 (60%)
DO graduates	226 (15%)	238 (16%)
US IMG	135 (9%)	127 (8.5%)
Non-US IMG	228 (15%)	222 (15%)

3.2% ↓

Updated Pediatric Salary Analysis

Catenaccio, Rochlin & Simon. Differences in Lifetime Earning Potential for Pediatric Subspecialists. Pediatrics 2021.



Medical Student Debt

Graduate in 2008:

- 87% had educational debt
- Mean Debt Burden = $158,061

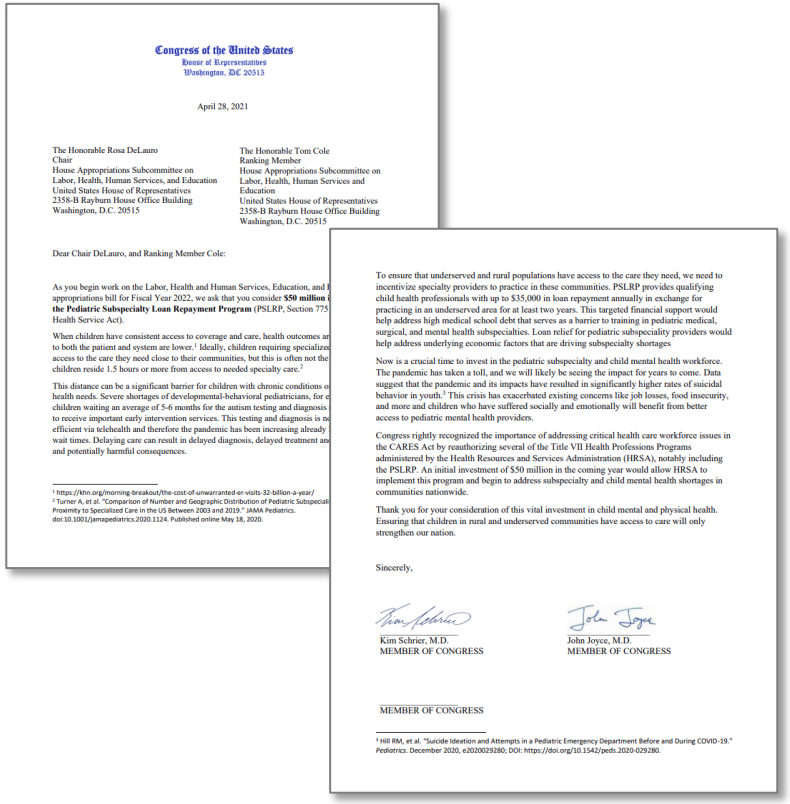
Graduate in 2019:

- 73% had educational debt
- Mean Debt Burden = $200,000

Pediatric Subspecialty Loan Repayment Program

- Authorized for $30 million for pediatric subspecialists with an additional $20 million for pediatric and adolescent behavioral health providers.
- In 2022, Congress appropriated $5 million for this program, which included behavioral health care. In 2023, a total of $15 million was appropriated.
- Provides up to $35K annually for up to 3 years to pediatric subspecialists who agree to practice in an underserved area.
- California: Prop 56 - $220 million, underserved area

(CalHealthCares Loan Repayment Program – 200 Pediatric subspecialists)



Congress of the United States
House of Representatives
Washington, DC 20515

April 28, 2021

The Honorable Rosa DeLauro
Chair
House Appropriations Subcommittee on
Labor, Health, Human Services, and Education
United States House of Representatives
2358-B Rayburn House Office Building
Washington, D.C. 20515

The Honorable Tom Cole
Ranking Member
House Appropriations Subcommittee on
Labor, Health, Human Services and
Education
United States House of Representatives
2358-B Rayburn House Office Building
Washington, D.C. 20515

Dear Chair DeLauro, and Ranking Member Cole:

As you begin work on the Labor, Health and Human Services, Education, and
appropriations bill for Fiscal Year 2022, we ask that you consider **$50 million**
the Pediatric Subspecialty Loan Repayment Program (PSLRP, Section 775
Health Service Act).

When children have consistent access to coverage and care, health outcomes ar
to both the patient and system are lower.[1] Ideally, children requiring specialize
access to the care they need close to their communities, but this is often not the
children reside 1.5 hours or more from access to needed specialty care.[2]

This distance can be a significant barrier for children with chronic conditions o
health needs. Severe shortages of developmental-behavioral pediatricians, for e
children waiting an average of 5-6 months for the autism testing and diagnosis
to receive important early intervention services. This testing and diagnosis is n
efficient via telehealth and therefore the pandemic has been increasing already
wait times. Delaying care can result in delayed diagnosis, delayed treatment an
and potentially harmful consequences.

[1] https://khn.org/morning-breakout/the-cost-of-unwarranted-er-visits-32-billion-a-year/
[2] Turner A, et al. "Comparison of Number and Geographic Distribution of Pediatric Subspecial
Proximity to Specialized Care in the US Between 2003 and 2019." JAMA Pediatrics.
doi:10.1001/jamapediatrics.2020.1124. Published online May 18, 2020.

To ensure that underserved and rural populations have access to the care they need, we need to incentivize specialty providers to practice in these communities. PSLRP provides qualifying child health professionals with up to $35,000 in loan repayment annually in exchange for practicing in an underserved area for at least two years. This targeted financial support would help address high medical school debt that serves as a barrier to training in pediatric medical, surgical, and mental health subspecialties. Loan relief for pediatric subspecialty providers would help address underlying economic factors that are driving subspecialty shortages

Now is a crucial time to invest in the pediatric subspecialty and child mental health workforce. The pandemic has taken a toll, and we will likely be seeing the impact for years to come. Data suggest that the pandemic and its impacts have resulted in significantly higher rates of suicidal behavior in youth.[3] This crisis has exacerbated existing concerns like job losses, food insecurity, and more and children who have suffered socially and emotionally will benefit from better access to pediatric mental health providers.

Congress rightly recognized the importance of addressing critical health care workforce issues in the CARES Act by reauthorizing several of the Title VII Health Professions Programs administered by the Health Resources and Services Administration (HRSA), notably including the PSLRP. An initial investment of $50 million in the coming year would allow HRSA to implement this program and begin to address subspecialty and child mental health shortages in communities nationwide.

Thank you for your consideration of this vital investment in child mental and physical health. Ensuring that children in rural and underserved communities have access to care will only strengthen our nation.

Sincerely,

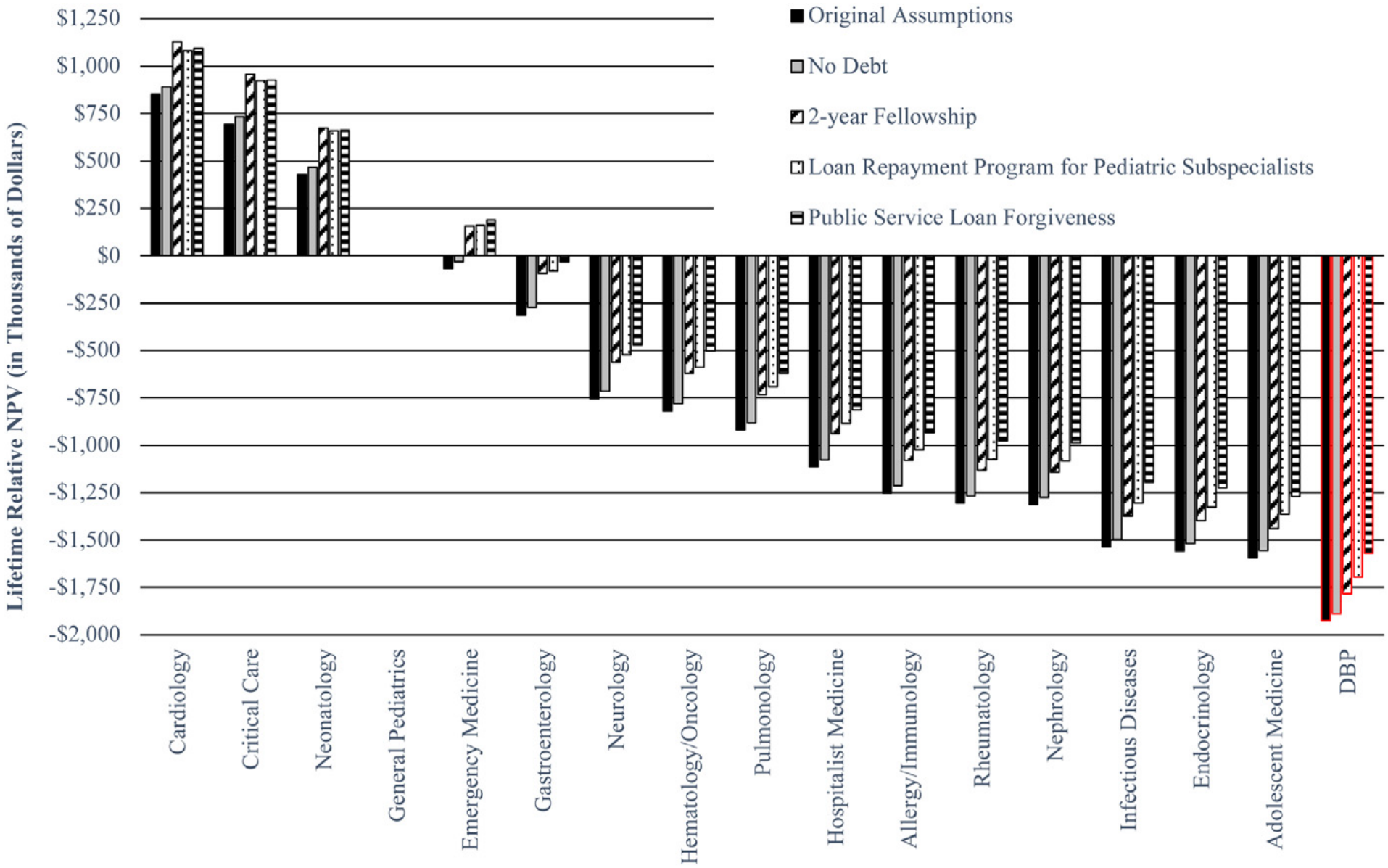
Kim Schrier, M.D.
MEMBER OF CONGRESS

John Joyce, M.D.
MEMBER OF CONGRESS

MEMBER OF CONGRESS

[3] Hill RM, et al. "Suicide Ideation and Attempts in a Pediatric Emergency Department Before and During COVID-19." *Pediatrics*. December 2020, e2020029280; DOI: https://doi.org/10.1542/peds.2020-029280.

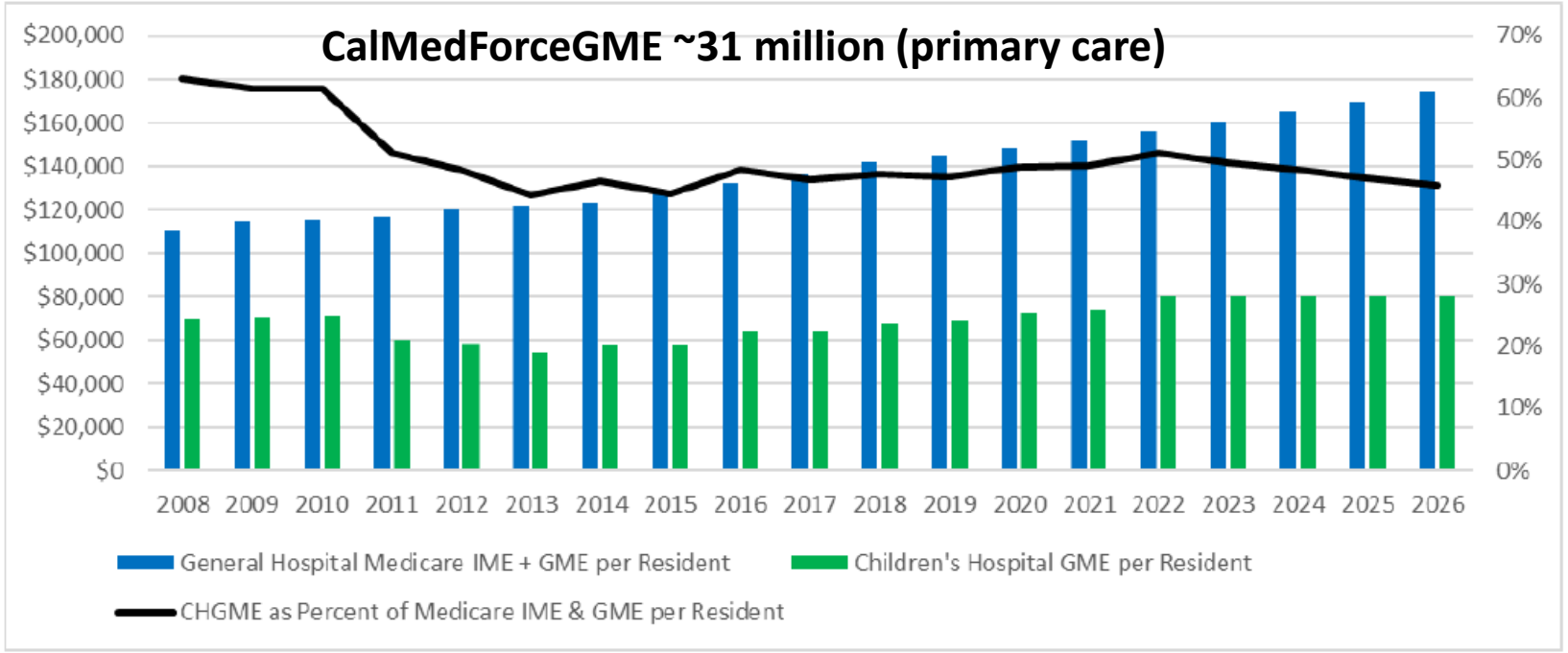
Pediatric Salary Analysis



Children's Hospitals GME

- CHGME supports the training of half the nation's pediatricians and most subspecialists.
- CHGME funding per trainee is less than half of Medicare GME.
- Medicare GME funds grow 4% annually.
- Long-term goal is parity with Medicare GME.
- Will *decline* to 46% of Medicare GME by 2026 if action is not taken.
- Current funding is $385 million.
- Full funding will require $735 million.

Actual and Projected CHGME Payments Compared to Medicare GME Payments per Resident



National Academies Study Substantiated Major Concerns About the Future of the Pediatric Subspecialty Workforce

Pediatrics 2025: The AMSPDC Workforce Initiative
www.amspdc.org/workforce

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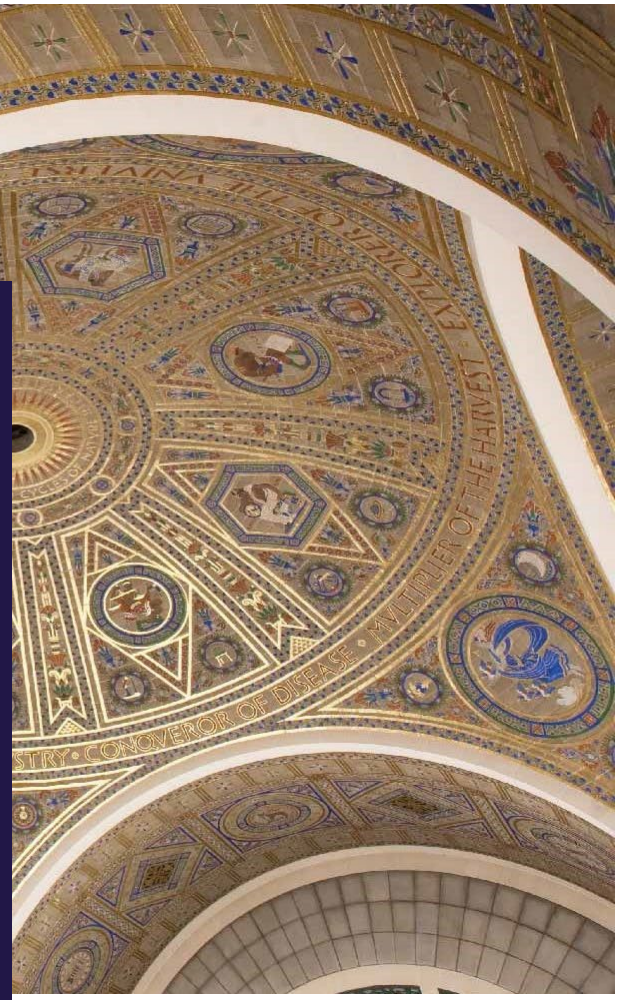
#Peds2025Workforce

NATIONAL ACADEMIES Sciences Engineering Medicine

The Future Pediatric Subspecialty Physician Workforce

Meeting the Needs of Infants, Children, and Adolescents



www.nationalacademies.org/pediatric-subspecialties

Released on Sept 7, 2023

NASEM Study Goals

1. Enhance education, training, recruitment and retention.

2. Promote collaboration and the effective use of services between pediatric primary care clinicians and subspecialty physicians.

3. **Reduce financial and payment disincentives to subspecialty careers**.

4. Support the pediatric physician-scientist pathway (NIH, HRSA, CIRM).

Enhance education, training, recruitment, and retention

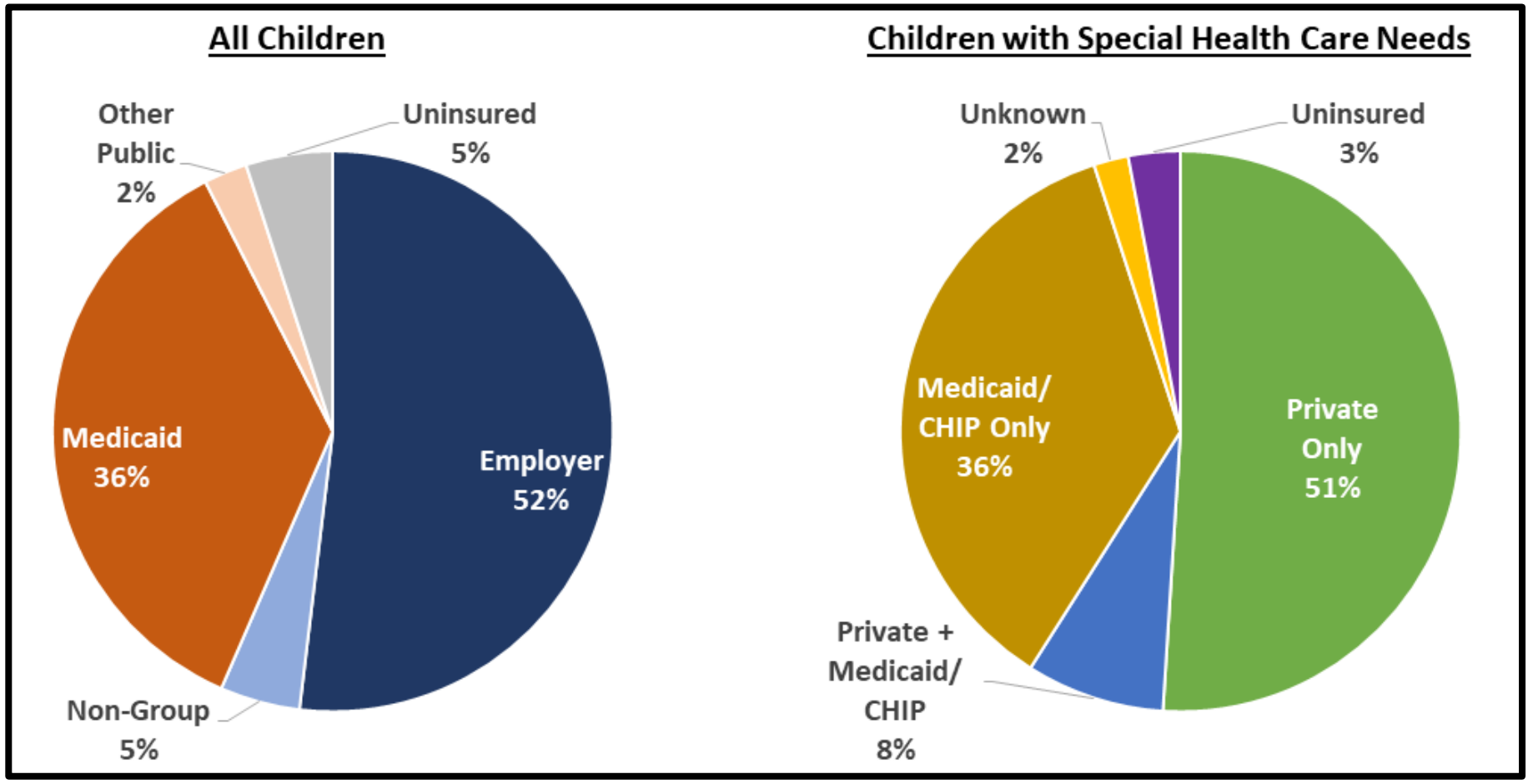
1. Graduate medical education (GME) formulas and programs need to be reformed, including Medicare GME, Children's Hospital GME, and California State GME to ensure equitable and sufficient support for pediatric GME which includes subspecialty pediatric training.

2. Funding should be distributed to address priority pediatric workforce needs, such as increased inclusion of clinicians from underrepresented in medicine backgrounds, high-priority subspecialties, geographic shortages, and enhanced training for new models of care.

Promote collaboration and effective use of services between primary pediatric care clinicians and subspecialty physicians

1. Pediatrics has developed innovative models of care and emphasized evidence-based care delivery models.
   - Embedded pediatric specialists in primary care
   - Team-based care
2. Public and private health insurance payers should adequately reimburse these evidence-based care delivery models.
3. We need legislative action, state and CMS to accomplish this goal.
   - Telehealth across state lines
   - E-Consults
   - Incentivize general pediatrics to provide basic complex care to children
   - Provide incentives for models that promote transitions to adult care

Financing Children's Health Care



State of California (~10M Children)

Medi-Cal ~ 50%
Higher with Special Health Care Needs (~70%)

Financing Children's Health Care – Key Findings (7)

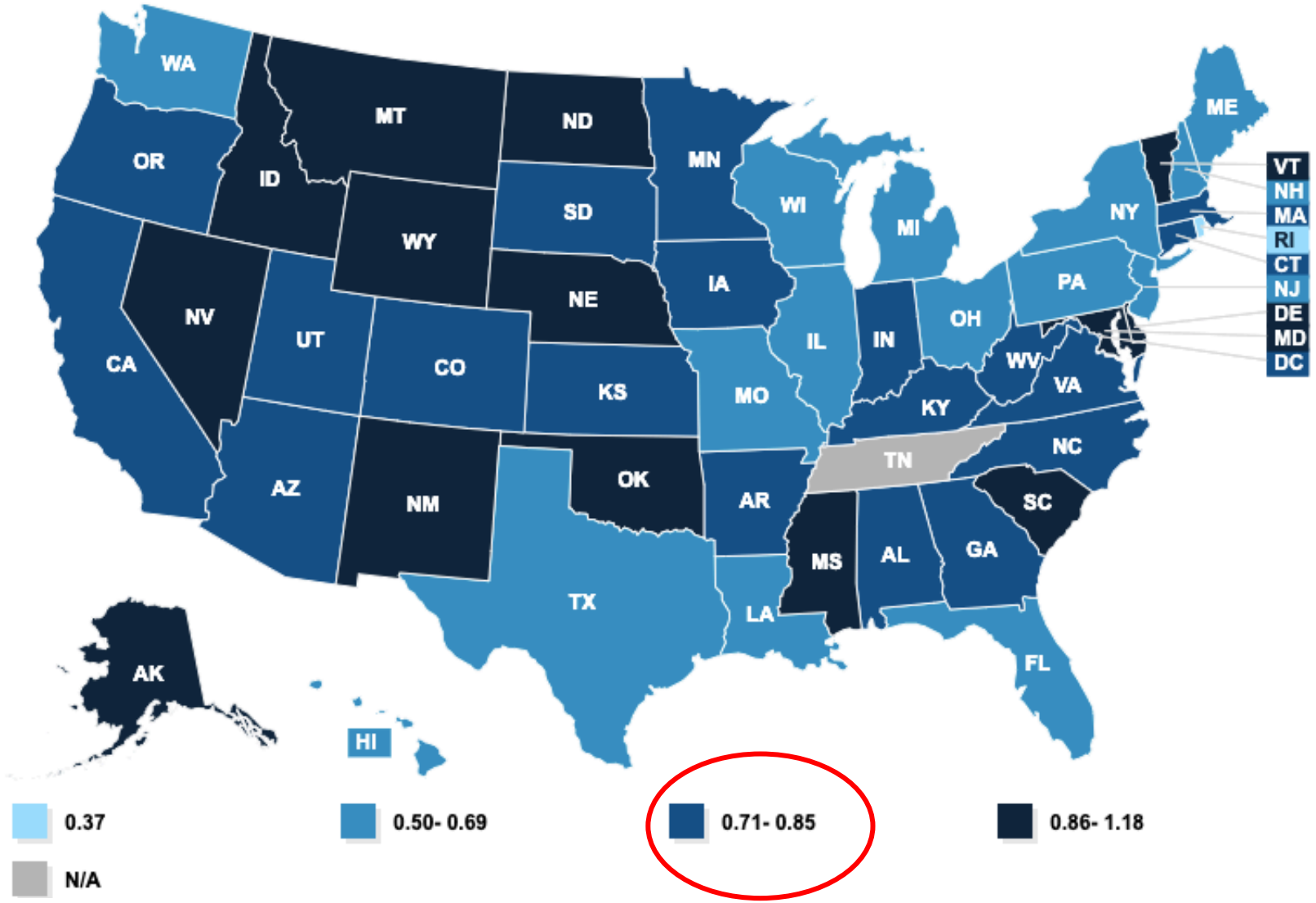
1. While rates of commercial coverage are similar between children and adults, **Medicaid covers 35 percent of children and a higher share of children with complex medical needs**. State Medicaid agencies have discretion in setting payment rates depending on state rules. Private insurers set payment rates based on market forces, negotiation, and other proprietary factors.

2. Comparisons of Medicaid and Medicare fee schedules generally find **Medicaid rates to be less than Medicare**, with some variation across states, specialties, or services.

3. Efforts to increase Medicaid payment rates through litigation under the equal access provision have been unsuccessful, the federal government has issued limited regulations to enforce **the equal access provision, and there has been limited oversight of state payment rates.**

4. Research studies have established **a connection between payment levels and provider participation and children's access to care**.

Medicaid-to-Medicare Fee Index (2019)



Source: Kaiser Family Foundation. Use this link for an interactive map to view your state.

Financing Children's Health Care – Key Findings - continued

5. Existing **productivity-based fee schedules** (i.e., RVUs) **generally** reward procedure-based subspecialties and **undervalue** the increased time needs per clinical interaction, increased pre- and post-service time, and higher practice expenses for most subspecialty care, **especially pediatric subspecialty care**.

6. There is some evidence that pediatric subspecialties generate less revenue compared with adult subspecialties, in part due to insurance mix. As a result, **salaries for pediatric subspecialists are often lower than for their adult** medicine counterparts.

7. The exact **methods through which pediatric subspecialists' salaries are set** are subject to complex, proprietary formulas that vary by institution.

Financing Children's Health Care - Conclusions

1. Medicaid can be a mechanism to target investments in specific types of health care services for specific populations. **Low Medicaid payments represent an underinvestment by federal and state governments in children's health.** States can raise Medicaid payment rates using matched state-federal funds**, or other mechanisms**.

2. The large percentage of children on Medicaid, especially those cared for by subspecialists, coupled with the low payment rates and RVUs, **adversely affects reimbursement for pediatric care**. This, in turn, results in **lower salaries for most pediatric subspecialties** compared with adult subspecialties and compared with private practice primary care (or general) pediatricians. The relatively lower salaries for pediatric subspecialties, particularly **medical subspecialties, can influence the career decisions of trainees pursuing pediatrics and pediatric subspecialty training**.

3. **Payment rates are one of many inputs that influence access to pediatric subspecialists**.

Pediatrics Subspecialty Shortage (National)

PEDIATRIC SPECIALTY SHORTAGES BURDEN CHILDREN AND FAMILIES

A robust pediatric workforce is essential to ensuring that no child lacks access to high-quality medical care. Forty children's teaching hospitals recently responded to a 2017 Children's Hospital Association (CHA) survey that asked children's hospitals to highlight the specialties with the longest appointment wait times and vacancies at their institutions.

SPECIALTIES WITH THE HIGHEST AVERAGE WAIT TIMES:

- Genetics — 20.8 WEEKS
- Developmental Pediatrics — 18.7 WEEKS
- Pain Management Palliative Care — 12.1 WEEKS
- Child and Adolescent Psychiatry — 9.9 WEEKS
- Dermatology — 8.3 WEEKS
- Allergy and Immunology — 7.7 WEEKS
- Dentistry — 7.6 WEEKS

MEASUREMENT

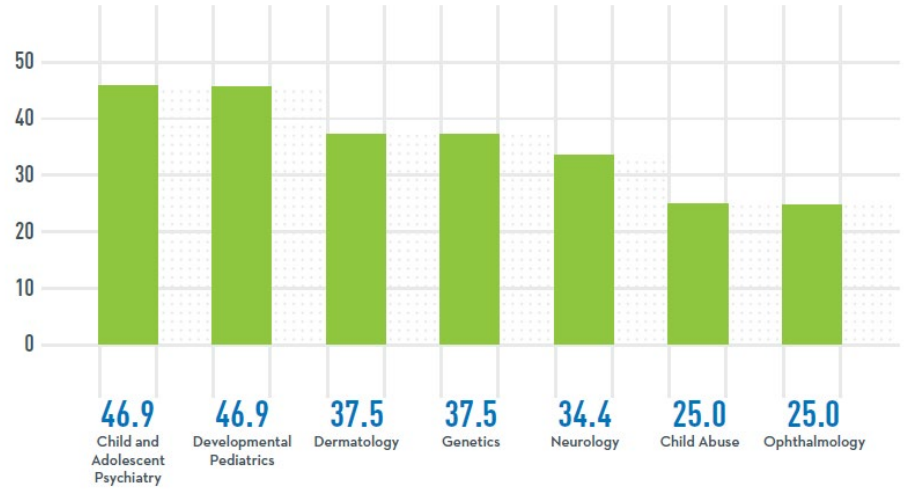
"Days to third-next available appointment" is used to measure wait time scheduling. This

CHILDREN'S HOSPITAL ASSOCIATION

TOP-RANKED SHORTAGES THAT AFFECT ABILITY TO DELIVER CARE

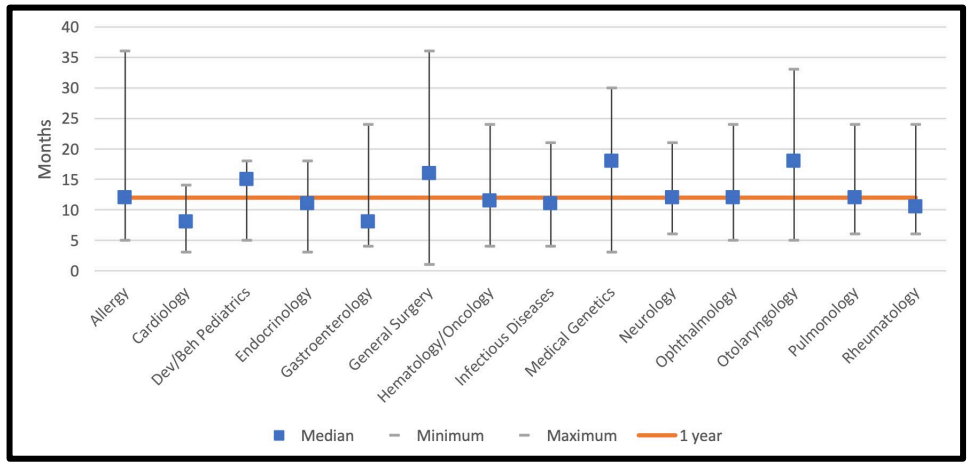
- 11.8% DEVELOPMENTAL PEDIATRICS
- 10.8% CHILD AND ADOLESCENT PSYCHIATRY
- 9.7% PEDIATRIC NEUROLOGY
- 8.6% GENETICS
- 7.5% CHILD ABUSE

PERCENT OF HOSPITALS REPORTING VACANCIES

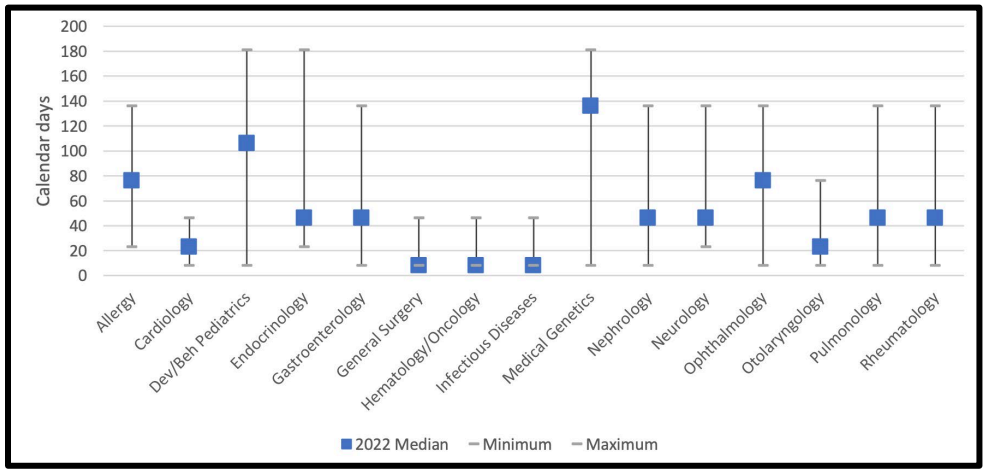


California Data

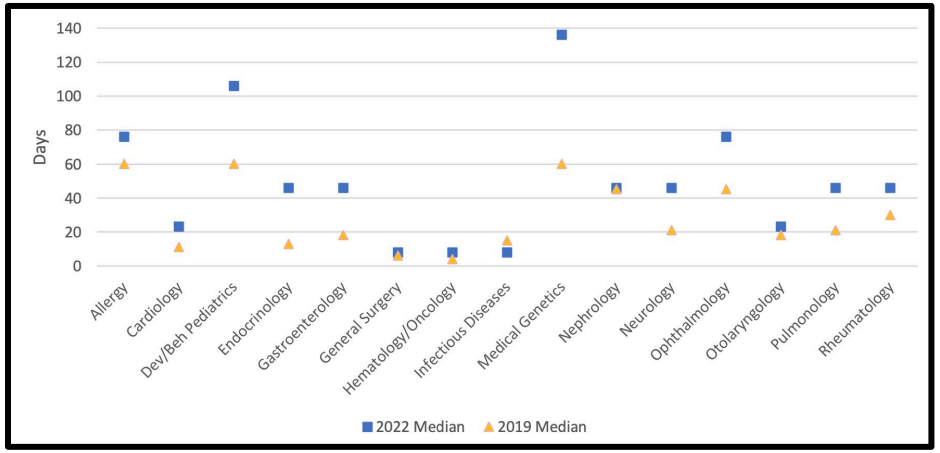
Average Pediatric subspecialty physician recruitment length



Patient wait times (days) by Pediatric subspecialty



Patient wait times: 2019 vs 2022



Financing Children's Health Care

NATIONAL RECOMMENDATIONS

1. To invest in children's health and address the factors that contribute to limited access to pediatric subspecialty care, **Congress should allocate additional federal funding to increase payment for pediatric services**.

2. Within 5 years, Congress should **provide federal funds to states to increase Medicaid payment rates for pediatric services to achieve or exceed parity with Medicare payment rates**.

3. The Centers for Medicare & Medicaid Services should **prioritize attention to pediatric services in assigning relative value units that accurately reflect the time and resource use for pediatric subspecialty care**.

Reduce financial and payment disincentives to Pediatric subspecialty careers

1. CMS Undervalues the Care of Children
   - Physician reimbursement is driven by the assignment of **relative value units (RVUs)**.
   - Assignment of RVUs is developed by the RVS Update Committee (RUC), a committee formed by the AMA, and has only one representative from the pediatric community.
   - Membership of the RUC is heavily weighted to adult and surgical disciplines.
   - As an example,
     - An average hip replacement requires 90 minutes of surgical time and is assigned an RVU value of 21.24.
     - A comprehensive outpatient pediatric visit according to CMS guidelines requires 40 to 60 minutes of care (but often involves more time at the visit and in follow up) and has an RVU value of approximately 4.0.

Reduce financial and payment disincentives to Pediatric subspecialty careers

1. The average salary of a pediatrician is 25% less than a physician trained in adult medicine for the same subspecialty care. This leads to a loss of lifetime earnings of $1.2 million dollars compared to an adult specialist.
2. To invest in children's health and address the factors that contribute to limited access to pediatric subspecialty care, Congress should allocate additional federal funding to increase payment for pediatric services.
3. Within 5 years, Congress should provide federal funds to states to increase Medicaid payment rates for pediatric services to achieve or exceed parity with Medicare payment rates.
   - These federal funds should be provided to all states, and the federally funded payment increases should be mandatory.

Reduce financial and payment disincentives to Pediatric subspecialty careers

1. The average salary of a pediatrician is 25% less than a physician trained in adult medicine for the same subspecialty care. This leads to a loss of lifetime earnings of $1.2 million dollars compared to an adult specialist. State of California could assist in achieving adult salary rates for Pediatric subspecialists.
2. To invest in children's health and address the factors that contribute to limited access to pediatric subspecialty care, State of California should allocate additional funding to increase payment for pediatric services.
3. State of California can increase Medi-Cal rates for Children's services to achieve parity but better yet exceed parity with Medicare payment rates.
4. Expand Loan Repayment Programs further to Pediatric Subspecialists.

Thank you

More information can be found at:
www.nationalacademies.org/pediatric-subspecialties

CHILDREN'S Specialty Care Coalition
Putting California's Children First

Association of Medical School Pediatric Department Chairs
AMSPDC

Pediatrics 2025: The AMSPDC Workforce Initiative
www.amspdc.org/workforce

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#Peds2025Workforce

Reactor Panel

Panelists:

- Jenny McLelland, Parent Advocate
- James Stein, MD, Senior Vice President & Chief Medical Officer, Children's Hospital Los Angeles
- John Moua, MD, Chief, University of California San Francisco Fresno Pediatrics
- Craig Swanson, MD, Medical Director, Children's Services, Sutter Medical Center, Sacramento

Moderator:

- Carlos Lerner, MD, CSCC Board President

Jenny McLelland

Facts and Figures — Clinical

Children's Hospital LOS ANGELES

CHLA by the Numbers

CCS CARE

79,178 VISITS

25% OF ALL VISITS

33% OF HOSPITAL DISCHARGES

10.3 (AVG DAYS IS 6.6) AVERAGE LENGTH OF STAY

74% MEDI-CAL DISCHARGES

RESEARCH

$166.2 MILLION TOTAL RESEARCH FUNDING

$52.4 MILLION TOTAL NATIONAL INSTITUTES OF HEALTH FUNDING

533 ACTIVE CLINICAL TRIALS

EDUCATION

MEDICAL TRAINING

111 pediatric residents
4 chief residents
142 fellows
362 medical students

NURSING TRAINING

2003 RN Residency graduates
703 nursing students

AFFILIATE

Keck Medicine of USC

RANKING

No. 7 in the Country
No. 1 on the West Coast

BEST CHILDREN'S HOSPITALS U.S.News HONOR ROLL 2023-2024

Children's Hospital LOS ANGELES

Pediatric Program in 2023

Community Regional Medical Center in Fresno, CA

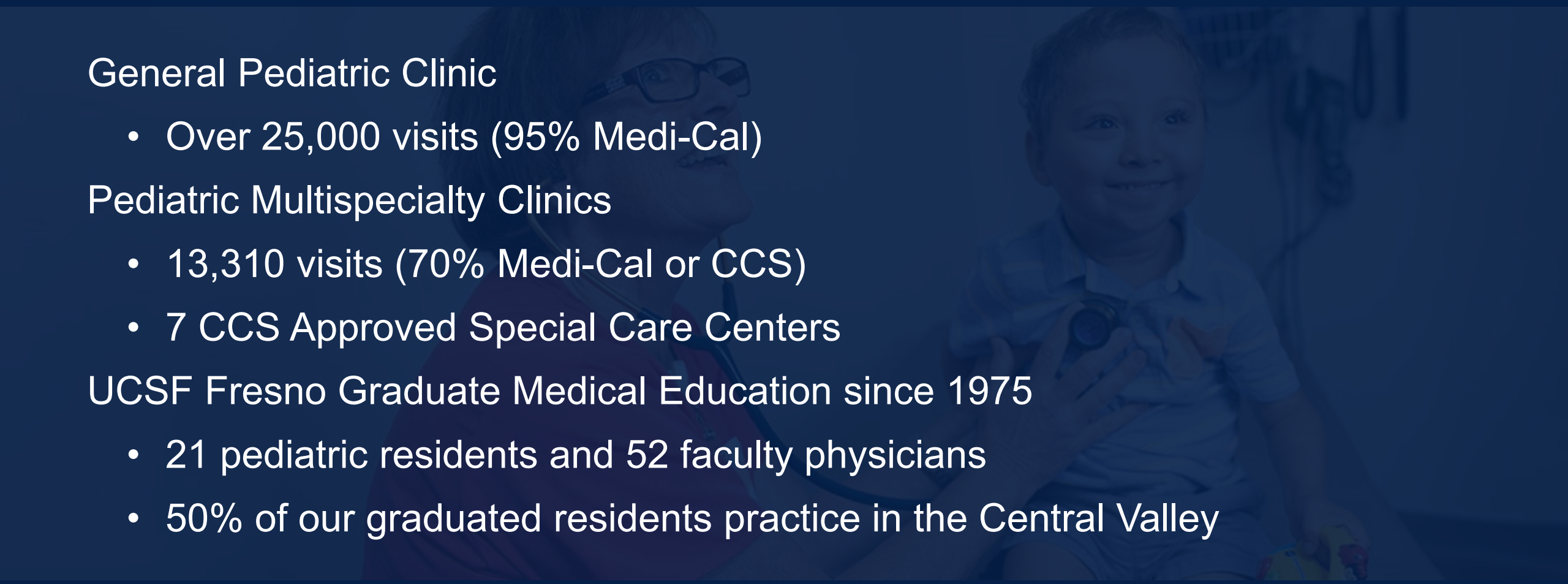
- Level 1 Trauma/Burn Center
- Second busiest ER in CA with 118,132 total patients and 11,565 pediatric patients
- Daily, 100-150 admitted patients boarding in ER

Inpatient Pediatrics

- 105 Pediatric/NICU Beds 95
- 23,149 Inpatient Days
- 5,523 Newborn deliveries

UCSF Fresno

Pediatric Program in 2023



General Pediatric Clinic

- Over 25,000 visits (95% Medi-Cal)

Pediatric Multispecialty Clinics

- 13,310 visits (70% Medi-Cal or CCS)
- 7 CCS Approved Special Care Centers

UCSF Fresno Graduate Medical Education since 1975

- 21 pediatric residents and 52 faculty physicians
- 50% of our graduated residents practice in the Central Valley

The Sutter Medical Center for Children

An Integrated & Comprehensive Regional Medical Center

Powered by science. Inspired by children.

The Sutter Medical Center for Children

- 121 Beds
- 13 CCS Special Care Clinics
- Level IV Tertiary NICU (~ 900 admissions)
- PICU/CVICU/ECMO (~1100)
- Pediatric Floor (~2600)
- Pediatric ED (~28000)
- OB (~6000 Births)
- 55% MediCal
- 20-25% CCS
- 20-25% Commercial (FFS & MC)

The Sutter Sacramento & Valley Regions

- 7 more hospitals, 4 “Rural”
- 2 NICUs (~350/~150), 1 Peds Floor (~800)
- Zero “rural” peds beds
- Many Foundation and other large and small medical Groups
- ~250,000 Pediatric Visits
- ~65% Commercial
- FQHC relationships

Sutter Health
Sutter Medical Center
Children's Center

Audience Q&A

- Please submit questions in the Q&A box

- If any questions are not answered due to time constraints, CSCC staff will follow up

Contact CSCC

- Erin Kelly, MPH, Executive Director – ekelly@childrens-coalition.org
- Katie Layton, Director of Government Affairs & Programs – klayton@childrens-coalition.org
- Website: www.childrens-coalition.org
- Find us on Twitter @CSCCdocs – https://twitter.com/CSCCdocs

CHILDREN'S Specialty Care Coalition

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