Pediatric Workforce Shortages
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Outline

• The Arizona pediatrician workforce shortages
• Causes of the shortage
• Potential solutions
• Future research
• Other resources for information
Arizona Pediatrician Supply

- Arizona ranks worse than 80% of other states in the pediatrician/child population ratio
- There are greater shortages of pediatric medical and surgical subspecialists than generalist primary care pediatricians
**Pediatric Workforce**

**Primary Care Pediatrician**
- Medical home
- Preventive health
  (immunizations, hearing, vision screening)
- Acute health problems
  (ear infections, pneumonia)
- Chronic health problems
  (asthma, obesity, diabetes)

**Pediatric Subspecialists**
- Cares for children who have special health care needs (e.g. cancer)
- Limits care to specialty area
- Many serve as teaching faculty and also conduct research
## Greatest Shortages of Arizona Pediatric Subspecialists

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Specialist/Child Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental/Behavioral Pediatrics</td>
<td>1/247,000</td>
</tr>
<tr>
<td>Adolescent Medicine</td>
<td>1/288,000</td>
</tr>
<tr>
<td>Infectious Disease</td>
<td>1/217,000</td>
</tr>
<tr>
<td>Kidney Disease</td>
<td>1/247,000</td>
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</table>
Arizona Pediatric Subspecialists/Child Population

- Pulmonology (1/108,000)
- Gastroenterology (1/102,000)*
- Endocrinology (1/102,000)
- Emergency Medicine (1/79,000)
- Hematology/Oncology (1/75,000)
- Cardiology (1/67,000)*
- Critical Care (1/67,000)
- Neonatology (1/34,000)*
Pediatrician Pipeline

- High school
- College
- Medical school
- Residency training
- Subspecialty training (minimum)
- Subspecialty training (maximum)

Pediatric subspecialists
When a Community Lacks Pediatric Subspecialists...

– Care may be provided by adult medicine subspecialists who lack appropriate training in pediatric care.

– Care for children who have complex illnesses may be provided by general pediatricians.

– Families must travel to a distant center for care.

– Families may need to relocate to another community.
Why Is Pediatric—as Opposed to Adult—Subspecialty Care Important?

• Pediatric subspecialty care:
  – Improves quality of care for children
    • Diagnosis, management, outcome
  
  – Lowers complication rates
    • surgical procedures
  
  – Decreases medical costs
    • Shorter length of stay and lower hospital charges
What Does Pediatric Subspecialty Care Cost, and What Are the Savings?

- Pediatric emergency medicine physicians treating croup reduced direct costs by $90 when compared to the same treatment delivered by adult emergency medicine physicians (Hampers and Faries, 2002).

- Younger children with appendicitis who were treated by pediatric surgeons had significant shorter hospital stays and/or decreased hospital charges than younger children treated by general surgeons for the same condition (Kokoski et al., 2004).

- Pediatric orthopedic surgeons achieved lower hospital charges than adult orthopedic surgeons for closed femoral shaft fractures (JT Smith et al., 1999).
Why do we have a shortage of Pediatric Subspecialists?

• Lack of funding for GME training in Arizona
• No federal funding for GME fellowship training
• Lack of financial return on educational investment
• Inability to support a practice outside of academic centers
Trends in Average Educational Debt Among Graduating Pediatric Residents

Financing GME

- Subspecialty training programs generally do not receive federal or state funding
- State funding for general pediatric training is “capped” and Arizona has eliminated state funding
- Hospitals with training programs care for uninsured and underinsured
- Childrens hospitals dependent on annual federal appropriations for GME funding
What Can Arizona Do to Address the Shortage?

- Support funding for pediatric GME
- Support appropriate payment for pediatric services
- Provide incentives for pediatricians to practice in Arizona (tax credits, loan repayment, technical assistance)
- Support programs that improve access to care in underserved areas
- Support telemedicine to enhance delivery of pediatric care by general pediatricians and pediatric subspecialists in shortage areas
- Support Pediatric Emergency Medicine Training in community hospitals
Medical and Osteopathic Student/Population Ratio

[Map showing medical and osteopathic student/population ratio across the United States]
Resident/Fellows per 100,000 population
What Can We Do Nationally about the Pediatric Subspecialty Shortage?

• Advocate for continued, consistent support of CHGME.

• Target GME to areas of need (provider and location).

• Support the appropriation of Section 5203 of the ACA (pediatric subspecialty loan repayment program) and state loan repayment programs.

• Promote appropriate payment for pediatricians.

• Advance the development of long-term workforce policy.

• Encourage the pediatrician-led, patient-centered medical home model.
Incentive Programs

• Incentives can include scholarships, visa waivers for IMGs, and tax credits.

• Example:
  – The Georgia Rural Physician Tax Credit (Georgia Department of Revenue Regulation 560-7-8-20) provides a tax credit to primary care physicians and general surgeons in Georgia who primarily admit patients to a rural hospital and reside in a rural county or a county contiguous to the rural county in which they practice. The credit, which maxes out at $5,000 annually, can be claimed for a five-year continuous period.
Loan Repayment Programs

• Physician loans may be repayed by state agencies, private foundations, physician employers, or some combination of all interested groups.

• Example:
  – The Health Professions Education Foundation Orange County Pediatric Specialties Physicians Loan Repayment Program is available to physicians who have been or are in the process of being certified by a member board of the American Board of Medical Specialties in a pediatric subspecialty.
  – An awardee may receive up to $125,000 to repay educational debt. Each awardee commits to a 3-year service obligation to practice as a full-time physician providing direct patient care to a patient population of at least 50% Medi-Cal or Healthy Families members including children under age of 5 in Orange County.
  – The program is funded by California’s Office of Statewide Health Planning and Development.
Technical Assistance Programs

• Technical assistance usually involves physician recruitment, retention, or practice management services.

• Example:
  – The Bi-State Primary Care Association New Hampshire-Vermont Recruitment Center works to recruit and retain primary care providers in New Hampshire and Vermont with particular emphasis on the needs of medically underserved areas and populations.
  – The Recruitment Center’s clients include federally qualified community health centers, public health practices, rural health clinics, and hospital-sponsored and private practice groups.
  – Since 1994, the Recruitment Center has worked with over 100 practices to develop personalized recruitment and retention strategies, in addition to providing direct candidate referrals.
Resources

American Academy of Pediatrics, Committee on Pediatric Workforce (COPW)
http://www.aap.org/copw/

St Lukes Health Initiatives, Graduate Medical Education, growing the physician pipeline http://www.slhi.org

Health Workforce Information Center http://hwic.org
Resources

American Academy of Pediatrics, Division of Workforce and Medical Education Policy
   – http://www.aap.org/workforce/

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