

Georgia Chapter

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN®



The GEORGIA Pediatrician

Celebrating our 70th Anniversary... 1954 – 2024!

President's Letter



Nicky Chin, MD

STANDING TOGETHER: A MESSAGE OF HOPE AND RESILIENCE

The start of fall signals a familiar rhythm—the return to school for our children and adolescents. Our offices should have been bustling

with the usual back-to-school Bright Futures checkups, forms for Headstart to college, and pre-participation physicals. What should have been a positive process leading into an expected safe space beyond our patient-centered medical home was tragically overshadowed for the students of Apalachee High School in Barrow County, where gun violence claimed four lives and left nine others injured.

As pediatricians, how do we process this? First and foremost, we are medical professionals committed to the care of all children. But we are also parents, grandparents, aunts, uncles, caregivers, and mentors to children within our personal lives. We, too, are grappling with feelings of fear, anger, frustration, and anxiety. At the same time, we must gather the courage to advocate for change, extend care and compassion to the victims and their families, and offer support to our own communities.

We are not only navigating our own emotions; we are being looked to by our patients and their families for guidance as they work through their post-traumatic stress, fear, confusion, and anger. Our strength comes from within and from the connections we share with our colleagues and communities. I am incredibly proud of the swift mobilization of our physician leaders and administrators within the Georgia Chapter. Their outreach to colleagues in Barrow

County, as well as the resources provided to pediatricians across the state, is a true testament to the power of teamwork. Together, they have extended support in addressing school crises, promoted physician wellness, and continued the push for firearm injury prevention advocacy. The work happening behind the scenes, often beyond the hours of our daily responsibilities, is immeasurable in its value.

We are not only navigating our own emotions; we are being looked to by our patients and their families for guidance...

In the aftermath of this tragedy, there are several important takeaways: We stand united in support of the Winder community in Barrow County, and we are committed to providing evidence-based trauma-informed care to families affected by senseless violence in our communities. We remain steadfast in our advocacy for firearm injury prevention legislation, ensuring that all spaces—whether in our homes, schools, or workplaces—are safe. We will continue to champion emotional wellness for families by increasing access to care, expansion of care, and push for equitable reimbursement for all medical providers, including our primary care and mental health colleagues. Above all, we will continue to prioritize children and adolescents as our guiding focus, our North Star.

It's also important to recognize that each of us can contribute in meaningful ways. The Georgia Chapter offers numerous opportunities for involvement: There are over 50 committees that address the breadth of holistic care for our children and adolescents. Each committee provides an opportunity for

Georgia AAP Board of Directors

PRESIDENT

Nicola Chin, MD, FAAP, Atlanta

VICE-PRESIDENT

Patrick Pulliam, MD, Stockbridge

SECRETARY

April Hartman, MD, Augusta

TREASURER

Benjamin Toole, MD, Albany

IMMEDIATE PAST PRESIDENT

Angela Highbaugh-Battle, MD, St. Marys

HONORARY PRESIDENT

Helena Bentley, MD College Park

HONORARY PRESIDENT

Ken Burch, MD, Savannah

DISTRICT REPRESENTATIVES

- District I** Sylvia Washington, MD, *Rome*
- District II** Marisa Gadea, MD, *Marietta*
- District III** Susan Smiley, MD, *Buford*
- District IV(a)** Jennifer Fowlkes-Callins, MD, *Atlanta*
- District IV(b)** Andrew Kirsch, MD, *Atlanta*
- District V(a)** Jane Wilkov, MD, *Decatur*
- District V(b)** Roy Benaroch, MD, *Dunwoody*
- District VI** Hiral Lavania, MD, *Cumming*
- District VII** Christy Mountain-Bonner, MD, *Sandersville*
- District VIII** Kathryn McLeod, MD, *Augusta*
- District IX** Jonathan Goodin, MD, *Carrollton*
- District X** Susan McWhirter, MD, *Columbus*
- District XI** Cheryl Tolliver, MD, *Valdosta*
- District XII** Stanley Jones, DO, *Jesup*
- District XIII** Brandy Gheesling, MD, *Savannah*
- District XIV** Kenny Esho, MD, *Athens*
- District XV** Kristen Deweese, DO, *Rocky Face*
- District XVI** Stephanie Fennell, MD, *Thomasville*

DEPARTMENT OF PEDIATRICS CHAIRS

- Lucky Jain, MD, Emory University School of Medicine, Atlanta
- Lynn Gardner, MD, Morehouse School of Medicine, Atlanta
- Valera Hudson, MD, Medical College of Georgia, Augusta
- Edward Clark, MD, Mercer Univ. School of Medicine, Macon
- Michael Bossak, MD, Mercer-Savannah, School of Medicine, Savannah

PEDIATRIC RESIDENT REPRESENTATIVES

- Emory University, Amanda Grace Kuhn, MD
- Emory University, Heather Hirsch, MD
- Morehouse School of Medicine - Shakeria Bonaparte, MD
- Mercer University, Macon, Rebecca Danielle Watkins, DO
- Mercer University, Savannah, Rebecca McCullough, MD

Continued from previous page.

connectivity and belonging, ensuring we continue to stand as a strong, supportive medical community. Explore and attend one (or two) that speaks to your inner passion; let us know if you would like to lecture on a topic.

The benefits of our advocacy efforts—such as safer firearms injury prevention, improving Medicaid and CMO reimbursement rates or addressing issues through our Public Health Task Force—are tangible and we make a real difference. Our bi-monthly communications, e-blasts, webinars, quality improvement projects, and ECHOs are designed to help us maintain our knowledge and skill sets, ultimately translating into improved clinical care for the children we serve. The Chapter's dedicated staff members are always available to provide support and guidance in any area of need—they are truly phenomenal.

Although I began by addressing a tragic event, I refuse to let sorrow define our pediatric community. I want to close on a celebratory note: This year, the Georgia Chapter of the American Academy of Pediatrics marks 70 years of service to the children, adolescents, and families of our state.

For me, this celebration is deeply personal. The Georgia Chapter has played a pivotal role in my professional and personal growth.

This milestone is a testament to our growth as a large Chapter with many years of national recognition.

When I was fresh out of residency 27 years ago, new to Georgia and looking for a sense of belonging, it was through the Chapter's conferences and the mentorship of local hospital and community leaders that I found my path. I continue to learn from the wisdom and perspectives of both new and established members, and I stand on the shoulders of the great pediatricians who have shaped our profession in this state.

As we celebrate this milestone and look to the future, I invite you all to join us—whether in person at the Gala or through your ongoing participation in our Chapter's initiatives. Together, we will continue to advocate, to heal, and to serve as champions for the health and well-being of Georgia's children.

With gratitude and optimism, I look forward to working with you all.



Nicola Chin, MD, FAAP



Preparing for the Fall/Winter Respiratory Season 2024-25



Iyabode (Yabo) Beysolow,
MD, MPH, FAAP

As the Fall sets in and we begin to prepare for the upcoming Winter season, let's keep protecting our children and adolescents from vaccine-preventable diseases a priority. In addition to everyday preventive actions¹⁻⁴, vaccines are vital in protecting us from deadly diseases. The past two fall/winter seasons, 2022-23 and 2023-24 showed us that the co-circulation of three potentially fatal viruses, Flu, SARS-CoV-2, and RSV, can overwhelm the capacity of our pediatric healthcare systems.

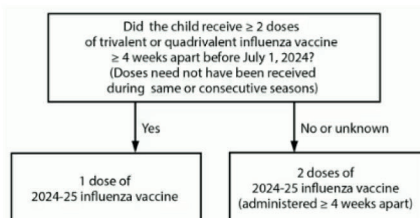
Flu Updates

This upcoming flu season, we can continue to recommend flu vaccination to all children six months of age and older who do not have a vaccine contraindication⁵.

Flu vaccination may begin as early as you receive flu vaccine supplies in your practice setting.

In particular, start vaccinating children six months through 8 years who may need two doses of flu vaccine this season to allow the second dose (which must be administered four or more weeks after the first dose) to be received, ideally, by the end of October⁵.

FIGURE. Influenza vaccine dosing algorithm for children aged 6 months through 8 years* — Advisory Committee on Immunization Practices, United States, 2024–25 influenza season.



* Children aged 6 months through 8 years who require 2 doses of influenza vaccine should receive their first dose as soon as possible (including during July and August, if vaccine is available) to allow the second dose (which must be administered ≥4 weeks later) to be received, ideally, by the end of October. For children aged 8 years who require 2 doses of vaccine, both doses should be administered even if the child turns age 9 years between receipt of dose 1 and dose 2.

Source: 2024-2025 Influenza Vaccine Recommendations, MMWR 8 29 24, Grohskopf et al.

Remember to also prioritize vaccination for children with certain chronic medical conditions who are at higher risk for complications, including hospitalization, if they become ill with the flu. Take advantage of opportunities to vaccinate. If you see families in your setting for well-child checks, minor illness, etc., and you do not think they may return later in the Fall/Winter, you may begin vaccinating now⁵.

The 2024-2025 flu vaccine is trivalent⁵. This change was made from the quadrivalent vaccine because one of the strains (influenza B/Yamagata virus) in the prior quadrivalent vaccine has not been detected using global surveillance for actively circulating influenza viruses since March 2020. The flu vaccine this upcoming season is hoped to be a good match for flu virus strains expected to circulate.

For further details on the use of Flu vaccines for the 2024-2025 season, visit ACIP Influenza Vaccine Recommendations 2024-25 and CDC: Flu Vaccine Recommendations.

RSV Updates

Two new products to protect infants and young children from RSV were introduced in the fall of 2023: nirsevimab, a monoclonal antibody for infants and some young children, and an RSV vaccine for pregnant people. Either the Pfizer ABRYSSVO vaccine is recommended during pregnancy, or a monoclonal antibody, nirsevimab, is recommended for babies shortly after birth, but administration of both is not needed to protect most infants.

During the first year of implementation of nirsevimab, supply issues hampered uptake. This 2024-25 season, CDC expects the supply of nirsevimab to be adequate to meet demands, with limited availability beginning in early September, ramping up during September, and product broadly available by Oct 1^{6,7}. The CDC also has plans to increase birth hospital enrollment in the VFC program nationwide to decrease limitations to providing nirsevimab to newborn infants before discharge from the hospital.

Data from the 2023-2024 uptake of RSV immunization products, shared during the ACIP's June 2024 meeting, was encouraging. For October 2023- March 2024, "51.2% of infants are estimated to be protected from

RSV by either receipt of nirsevimab or maternal RSV vaccination"⁵. CDC summarized real-world vaccine effectiveness studies at the June 2024 meeting, including "Nirsevimab was effective against RSV-associated Emergency Department encounters and hospitalization among infants in their first RSV season during the 2023-2024 RSV season". Currently, data is limited to assess maternal RSV vaccine effectiveness. However, CDC will continue to monitor the effectiveness of both products. Effectiveness data from

Spain and France was also encouraging⁷.

For healthcare provider guidance and recommendations on the use of RSV immunization products, visit: https://www.cdc.gov/rsv/hcp/clinical-overview/index.html#cdc_clinical_overview_disease_rates-immunizations-to-protect-infants.

Information to share with parents and caregivers may be found at: <https://www.cdc.gov/rsv/immunizations-protect-infants/index.html>.

COVID-19 Updates

We must stay up to date on our COVID-19 vaccines and encourage our families to do the same. At the June 2024 ACIP meeting⁸, data was presented by CDC, which showed that:

- Only 5% of children and adolescents ages ≤17 years with COVID-19-associated hospitalizations between October 2023 and March 2024 received a 2023-2024 vaccine dose.

Preparing for the Fall/Winter Respiratory Season

Continued from previous page.

People who are up to date on COVID-19 vaccines have a lower risk of severe illness, hospitalization, and death from COVID-19 than those who are unvaccinated or who have not completed the recommended doses.

CDC also shared data showing that 50% of infants, children, and adolescents ages ≤17 years with COVID-19-associated hospitalization (between July 2023 and March 2024) had no underlying medical conditions.⁸

Detailed dosing recommendations and guidelines for the use of COVID-19 vaccines for infants, children, and adolescents in the 2024-2025 season may be found at CDC: Use of COVID-19 Vaccines in the US—Interim Clinical Considerations.

Tips from the AAP on communicating with families about how to protect against fall and winter respiratory viruses and other resources for providers and families may be found at AAP: COVID-19 Vaccine for Children.

Prepare your office now for vaccinating all our children, particularly those at the highest risk of severe illness from flu, COVID-19, and RSV. Get vaccinated before the onset of the respiratory season. Finally, remember to catch up children and adolescents who may be behind on all other recommended vaccines.

Iyabode (Yabo) Beysolow, MD, MPH, FAAP

Chair, EPIC Immunization Advisory Committee

Resources

1. CDC, Respiratory Virus Guidance:
<https://www.cdc.gov/respiratory-viruses/guidance/index.html>
2. CDC, Preventing Influenza:
<https://www.cdc.gov/flu/prevent/prevention.htm>
3. CDC, Preventing RSV:
https://www.cdc.gov/rsv/vaccines/?CDC_AAref_Val=https://www.cdc.gov/rsv/about/prevention.html
4. CDC, Preventing COVID-19:
<https://www.cdc.gov/covid/prevention/index.html>
5. CDC: Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2024–25 Influenza Season:
[MMWR 8 29 24](https://www.cdc.gov/mmwr/82924a10.htm), Grohskopf et al.
6. ACIP Meeting Slides, June 2024, RSV: <https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2024-06-26-28/02-RSV-Mat-Peds-Stokley-508.pdf>
7. ACIP Meeting Slides, June 2024, RSV, Slide
<https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2024-06-26-28/04-RSV-Mat-Peds-Payne-508.pdf>
8. ACIP June 2024 Meeting Slides, COVID-19—Associated Hospitalizations among Children and Adults — COVID-NET:
<https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2024-06-26-28/02-COVID-Havers-508.pdf>

Disclosure: Dr. Beysolow serves as a participant as requested for vaccine advisory board workshops and general vaccine speaker opportunities for GSK and Sanofi, 2022 to present.

Georgia Chapter
American Academy of Pediatrics

RENAISSANCE WAVERLY HOTEL

COBB GALLERIA CENTRE

70th
ANNIVERSARY
1954 - 2024

2024 FALL MEETING

Pediatrics on the Parkway

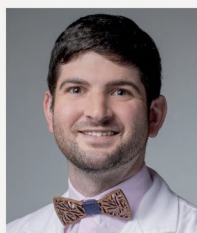
OCTOBER 24-26, 2024 • COBB GALLERIA CENTRE • ATLANTA, GA



Current Practices and Challenges in Managing Bedwetting: A Georgia Pediatrician Survey



**Jared Kirsch
MD¹**



**Benjamin Press
MD²**



**Andrew J Kirsch
MD, FAAP, FACS²**

About the authors:

¹PGY-3, Harbor-UCLA Pediatrics Residency Program

²Department of Pediatric Urology, Emory University and Children's Healthcare of Atlanta

Introduction:

Primary nocturnal enuresis is a common disorder among children and adolescents. The prevalence of nocturnal enuresis is over 10% in children 6 years of age⁽¹⁾, 5% among 10-year-olds^(2,3) and 0.5-1% among teenagers and young adults.⁽⁴⁾ Identification and treatment of this condition is of paramount importance, because if left untreated, nocturnal enuresis can have significant downstream physiologic and psychologic consequences, including sleep disturbances,⁽⁵⁾ and impaired self-esteem.⁽⁶⁾ While nocturnal enuresis is a common childhood problem, general parental knowledge of accepted causes and effective treatments appears to be lacking. A parental survey reported 55% of parents would seek treatment for their child with nocturnal enuresis and only 28% reported awareness of effective treatments.⁽⁷⁾ The purpose of our study was to evaluate practice patterns about the management of nocturnal enuresis by reporting results from a contemporary survey of members of the Georgia Chapter of the American Academy of Pediatrics (GA AAP)

Methods:

Recently, an anonymous survey was distributed to approximately 1,500 pediatricians who are members of the GA AAP. The survey consisted of 24 questions focused on the diagnosis and management of primary nocturnal enuresis in children, with responses requested exclusively from pediatricians. The survey achieved a response rate of 8.5% (127 out of 1,500). While our response rate is slightly below the typical range, it still provides valuable insights, especially considering the specialized nature of our respondents.

Results:

The survey results are shown in the Appendix.

More than half of the pediatricians who took part in the survey had over 20 years of clinical experience. Nearly 70% worked in suburban areas, and over 80% treated 1-10 children with bedwetting each month.

Most pediatricians (92.1%) believe it is "important" or "very important" to address bedwetting. However, more than half believe the current treatments "do not meet the needs of families" and nearly 70% think "finding an effective treatment" is the biggest challenge.

Only 9% of pediatricians report recommending medications (e.g., Vasopressin or DDAVP) for nocturnal enuresis "frequently," despite only 70% of pediatricians believing they are "very effective" or "moderately effective." Since medications are not ubiquitously effective and have potential side effects, pediatricians rarely prescribe them to treat bedwetting. Half of pediatricians report recommending bedwetting alarms "frequently," but 51.2% admit that these alarms are only "somewhat effective." Additionally, 14.2% report "no benefit" from using them, while less than 5% find bedwetting alarms to be "very effective."

When seeing a child 5-7 years old with nocturnal enuresis, 64.6% of

respondents would offer behavioral modifications (i.e., limiting fluids and emptying bladder before bedtime) and 35.4% would offer supportive therapy. Interestingly, none would prescribe bedwetting alarms or medications. Pediatricians agree with published research that managing behavior alone is not effective for treating bedwetting, with 74.8% reporting it is only "slightly," or "not effective." For patients aged 8-11, the percentage of pediatricians who recommended behavioral therapy decreased to 47.2%, and 44.9% would offer either medical therapy or a bedwetting alarm. For children aged 12-15, 32% suggest enuresis alarms and 23% prescribe medications, while only 16.5% would offer behavioral therapy as first-line therapy. Twenty-six percent of pediatricians would refer to a pediatric specialist as the first step in management. For adolescents and young adults (≥16 years of age), most pediatricians would refer to a specialist (70.1%).

Comment:

It's clear that most pediatricians believe it is important to address bedwetting. More than half, however, believe the current treatments do not meet the needs of families and most think finding an effective treatment is the biggest challenge. Based on the survey, prepubertal children are generally not referred to a specialist. In the younger age group (below age 11), more definitive treatments such as bedwetting alarms and/or medications, are seldom offered; however, current research suggests behavioral modifications alone are not effective in treating nocturnal enuresis.⁽⁸⁾ By the start of puberty, only around 50% are offered such treatments. Older adolescents are referred to a specialist beyond age 15. Most pediatricians, however, would offer earlier interventions if the current treatment options provided better outcomes, as evidenced by over 40% admitting they delay treatment with medications or alarms due to perceptions of ineffective treatment success. Whereas many wait until puberty to prescribe medications and/or offer alarms, our survey shows earlier treatment would be offered if a better solution were available.

Primary nocturnal enuresis is a common condition that can impair a child's psychosocial development. Affected children and caretakers should be educated about its prevalence, potential associated problems, associated co-morbidities, and the necessity of treatment. Education should also be provided to primary care physicians and providers who are often given the first opportunity to help children with primary nocturnal enuresis.

References

- (1) Hellström AL, Hanson E, Hansson S, Hjalmsås K, Jodal U. Micturition habits and incontinence in 7-year-old Swedish school entrants. *European journal of pediatrics*. 1990;149(6):434-7.
- (2) Loberge L, Tremblay R, Vitaro F, Montplaisir J. Development of Parasomnias From Childhood to Early Adolescence. *Pediatrics*. 2000;106:67-74.
- (3) Nevéus T, Hetta J, Cnattingius S, Tuvemo T, Läckgren G, Olsson U, et al. Depth of sleep and sleep habits among enuretic and incontinent children. *Acta paediatrica (Oslo, Norway : 1992)*. 1999;88(7):748-52.
- (4) Hirasing RA, van Leerdam FJ, Bolk-Bennink L, Janknegt RA. Enuresis nocturna in adults. *Scandinavian journal of urology and nephrology*. 1997;31(6):533-6.
- (5) Van Herzele C, Dhondt K, Roels SP, Raes A, Hoebeke P, Groen LA, et al. Desmopressin (melt) therapy in children with monosymptomatic nocturnal enuresis and nocturnal polyuria results in improved neuropsychological functioning and sleep. *Pediatric nephrology (Berlin, Germany)*. 2016;31(9):1477-84.
- (6) Häggblöf B, Andrén O, Bergström E, Marklund L, Wendelius M. Self-esteem before and after treatment in children with nocturnal enuresis and urinary incontinence. *Scandinavian journal of urology and nephrology Supplementum*. 1997;183:79-82.
- (7) Schlomer B, Rodriguez E, Weiss D, Copp H. Parental beliefs about nocturnal enuresis causes, treatments, and the need to seek professional medical care. *Journal of pediatric urology*. 2013;9(6 Pt B):1043-8.
- (8) Nevéus T, Fonseca E, Franco I, Kawauchi A, Kovacevic L, Nieuwhof-Leppink A, et al. Management and treatment of nocturnal enuresis—an updated standardization document from the International Children's Continence Society. *Journal of pediatric urology*. 2020;16(1):10-9.

Resource:

- <https://gaaap.org/wp-content/uploads/2024/09/Current-Practices-and-Challenges-in-Managing-Bedwetting-A-Georgia-Pediatrician-Survey.pdf>

Parents are Hungry to Confidently Nourish Their Children

Download this toolkit to learn more about the scientific evidence on how dairy every day is a healthy way to nourish brains, bones and bodies.

Scan the QR code or go to USdairy.com/NationalDairyCouncil



FAMILY HANDOUTS & OFFICE POSTERS AVAILABLE IN:

✓ ENGLISH

✓ SPANISH



(English)



(Spanish)



Interested in staying up to date on dairy research, resources and recipes? Scan the QR code to join the Dairy Nourishes Network.

NATIONAL DAIRY COUNCIL | USDAIRY.COM





Osteogenesis Imperfecta: More than blue eyes and broken bones



Sylvia Washington
MD, FAAP

Years ago, when I was in pediatrics residency, I was called to the NICU to see a baby with blue eyes and broken bones. That was my first introduction to osteogenesis imperfecta: something rare for all the trainees to see in person. I remember wondering what life would be like for that precious child.

Since that time, I have had the honor of being the primary care pediatrician for a few children with osteogenesis imperfecta over the course of 14 years. Here are 5 things a general pediatrician should know about osteogenesis imperfecta:

1. Osteogenesis is caused by a collagen gene defect.

There are 4 main types, which account for 85-90% of osteogenesis imperfecta:

- type I - mild, nondeforming, most common type
- type II - perinatally lethal
- type III - most severe nonlethal type, progressively deforming
- type IV - broad range of phenotypes, moderately to severely deforming

The patients I've cared for have type III and were born with fractures that occurred in utero.

2. The NICU/nursery care sets the tone for the course of care.

Parents want to know that we have some expertise in this area. Certain vital signs, like length measurement and blood pressure, may cause fractures and can be delayed until a later time. Parents also trust our judgment for home care regarding diaper changing, bathing, and general lifting of these fragile babies.

3. There are 2 care phases for children with osteogenesis imperfect

Source: Osteogenesis Imperfecta | Children's Healthcare of Atlanta (choa.org):

- 1) Acute fracture phase: Bisphosphates can be started as early as age 1 month. Pamidronate inhibits bone turnover to improve bone density, which can benefit children with more severe forms of OI. These infusions are given every 8-12 weeks, followed by calcium and vitamin D. This phase also includes surgery (femoral rods) that are typically placed at age 18 months, once a child is pulling to stand.
- 2) Maintenance Phase: all efforts focus on strengthening the bones as much as possible, including through physical therapy and bracing. My patients have benefited from aqua therapy and leg bracing.

Dr. Jill Flanagan at CHOA is an excellent orthopedic surgeon with whom I have collaborated in caring for my patients. She is a part of the OI multidisciplinary team. When my patients have an injury or fracture, I call her first!

4. Although motor milestones are typically delayed, social, fine motor, and language skills may also be affected. It's very

Certain vital signs, like length measurement and blood pressure, may cause fractures and can be delayed until a later time.

important to have Early Intervention Services do a full evaluation to start services during the first year of life.

5. **Optimism is important.** These kids love to play and have fun! CHOA has a great camp: Camp Wishbone is a weekend getaway held at Camp Twin Lakes in Winder, Georgia. During the weekend, families have the opportunity to participate in a variety of camp activities, including canoeing and kayaking, fishing, horseback riding, ceramics, biking, arts and crafts, archery, and climbing.

Sylvia Washington, MD, FAAP
Artium Health Floyd Pediatrics
Rome, GA



Georgia WIC is for your family



This institution is an equal opportunity provider.

To learn more
about Georgia WIC,
visit wic.ga.gov
or scan the QR code





Turner Syndrome – why early diagnosis is important?

Turner syndrome (TS) is a sex chromosome anomaly of females occurring in 1 in 2000-2500 live female births⁽¹⁾; however, the exact prevalence remains unclear, largely due to a significant number of late diagnoses and undiagnosed cases⁽²⁾. Individuals with TS often exhibit a broad spectrum of clinical presentations, ranging from mild to more severe phenotypes, which are influenced by underlying genetic variations⁽²⁾. Delayed diagnosis is common, with a median age of diagnosis at 15 years, which can lead to significant comorbidities; therefore, early diagnosis is extremely important for timely initiation of treatment and screening for comorbid conditions^(2,3). All-cause mortality is high in TS individuals - often due to cardiovascular disease^(2,4,5,6).

Updated international TS guidelines published in May 2024 emphasizes the importance of early postnatal diagnosis by increasing awareness of TS among pediatricians, family physicians and pediatric specialists⁽³⁾. The purpose of this article is to highlight the significance of early diagnosis, indications for genetic testing and the implications of early treatment and screening of comorbid conditions.

What is TS?

TS is a sex chromosome disorder that occurs in females who have one normal X chromosome and complete or partial absence of the other X chromosome. TS is characterized by a distinctive phenotype and comorbid conditions affecting multiple organ systems.

How is TS diagnosed?

TS can be diagnosed prenatally via noninvasive prenatal testing, abnormal triple or quadruple screen, fetal ultrasound, chorionic villus sampling or amniocentesis. Postnatally, TS is confirmed with a 30-cell metaphase karyotype, even if diagnosed prenatally⁽³⁾.

When to do genetic testing?

Genetic testing for TS is indicated one of these findings is the single clinical feature: lymphedema such as fetal hydrops or cystic hygroma; unexplained short stature; delayed puberty/secondary amenorrhea; infertility; left sided outflow congenital heart lesions like coarctation; or typical features like epicanthic folds, down slanted palpebral fissures, low set ears, micrognathia, narrow palate, or short broad webbed neck⁽³⁾.

When two of the following clinical features are present, genetic testing should be done: other congenital heart defects, such as atrial septal/ventricular septal defects, bicuspid aortic valves, or partial anomalous pulmonary venous connection; hearing impairment with short stature; renal anomalies like absent kidney, horseshoe kidney, hypoplastic kidney; dysplastic nails; multiple nevi; Madelung deformity; or neurocognitive/psychiatric problems⁽³⁾.

How to recognize short stature ?

Short stature is the most common presenting feature in TS. When warning signs of abnormal growth are present such as height < 3rd percentile, height significantly less than mid- parental target height, growth velocity < 4cm/year with declining growth percentiles, or height less than 2 SD below the mean for age and gender, obtain appropriate testing and referral to pediatric endocrinology.

How is fertility affected?

TS is associated with hypergonadotropic hypogonadism which can cause partial or complete ovarian insufficiency. Oocyte numbers rapidly decline from 14-15 weeks of gestation, often leading to streaked ovaries at birth. Delayed puberty is common, requiring estrogen therapy.

What co-morbid conditions are associated with TS?

Cardiovascular abnormalities, most commonly left sided lesions, hearing impairment, frequent ear infections, refractory errors, renal anomalies, Type 1 and Type 2 diabetes, obesity, autoimmune disorders like Hashimoto's thyroiditis, hypo/hyperthyroidism, celiac disease, inflammatory bowel disease, juvenile rheumatoid arthritis, neurocognitive and learning difficulties, and skin lesions are among the comorbidities associated with TS⁽³⁾. There is increased overall mortality caused by increased "all causes of death" with the majority caused by cardiovascular disease^(4,5,6).

How is TS treated ?

Growth Hormone therapy is recommended for short stature, while estrogen replacement is indicated for ovarian insufficiency in TS. A multidisciplinary team approach is essential in managing TS patients due to the complexity of their multiple comorbid conditions.

Children's Healthcare of Atlanta is one of the few centers in the United States where comprehensive management of TS patients is provided in collaboration with multiple specialists at the Multidisciplinary Turner Syndrome Clinic.

Why is early diagnosis important?

Short stature and delayed puberty are the major clinical problems in girls with TS. Initiation of Growth Hormone therapy as early as 2 years of age in the presence of growth failure is recommended to achieve near normal

Turner Syndrome

Continued from previous page.

final adult height. Early initiation and prolonged duration of therapy are associated with greater height gains. Timely induction of puberty with estrogen replacement is crucial for girls with TS who experience delayed puberty to help prevent the psychological and social challenges that can arise from the absence of pubertal changes during adolescence. Estrogen replacement also improves bone health and socialization. Early diagnosis is also essential to facilitate the implementation of necessary educational interventions. These interventions can significantly enhance academic achievement and overall quality of life. Cardiovascular disease is the leading cause of mortality in TS individuals, early screening; therefore timely follow up is critical in improving prognosis.

Nandini Vijayakanthi, MBBS, FAAP

Assistant Professor, Wake Forest University School of Medicine

Doris Fadoju, MD

Associate Professor, Emory University School of Medicine/Children's Healthcare of Atlanta

References:

- (1) Nielsen J, Wohler M. Chromosome abnormalities found among 34,910 newborn children: results from a 13-year incidence study in Arhus, Denmark. *Hum Genet.* 1991;87(1):81-83.
- (2) H Gravholt, Mette Viuff, Jesper Just, Kristian Sandahl, Sara Brun, Janiella van der Velden, Niels H Andersen, Anne Skakkebaek, The Changing Face of Turner Syndrome, *Endocrine Reviews*, Volume 44, Issue 1, February 2023, Pages 33–69, <https://doi.org/10.1210/edrev/bnac016>.
- (3) Claus H Gravholt, Niels H Andersen, Sophie Christin-Maitre, Shanlee M Davis, Anthonie Duijnhouwer, Aneta Gawlik, Andrea T Maciel-Guerra, Iris Gutmark-Little, Kathrin Fleischer, David Hong, Karen O Klein, Siddharth K Prakash, Roopa Kanakatti Shankar, David E Sandberg, Theo C J Sas, Anne Skakkebaek, Kirstine Stochholm, Janiella A van der Velden, The International Turner Syndrome Consensus Group, Philippe F Backeljauw, Clinical practice guidelines for the care of girls and women with Turner syndrome: Proceedings from the 2023 Aarhus International Turner Syndrome Meeting, *European Journal of Endocrinology*, Volume 190, Issue 6, June 2024, Pages G53–G151, <https://doi.org/10.1093/ajendo/lvae050>.
- (4) Schoemaker MJ, Swerdlow AJ, Higgins CD, Wright AF, Jacobs PA; United Kingdom Clinical Cytogenetics Group. Mortality in women with Turner syndrome in Great Britain: a national cohort study. *J Clin Endocrinol Metab.* 2008;93(12):4735–4742. doi:10.1210/jc.2008-1049
- (5) Viuff MH, Berglund A, Juul S, Andersen NH, Stochholm K, Gravholt CH. Sex hormone replacement therapy in Turner syndrome: impact on morbidity and mortality. *J Clin Endocrinol Metab.* 2020;105(2):468–478. doi:10.1210/clinem/dgz039.
- (6) Stochholm K, Juul S, Juul K, Naeraa RW, Gravholt CH. Prevalence, incidence, diagnostic delay, and mortality in Turner syndrome. *J Clin Endocrinol Metab.* 2006;91(10):3897–3902. doi:10.1210/jc.2006-0558

Resources:

- Turner Syndrome Foundation (US) – <https://www.turnersyndrome.foundation.org/>
- Turner Syndrome Society of the United States – <http://www.turnersyndrome.org/>

EPIC® PROGRAMS: BREASTFEEDING & IMMUNIZATION

EPIC®
educating
physicians
& Practices
in their
communities

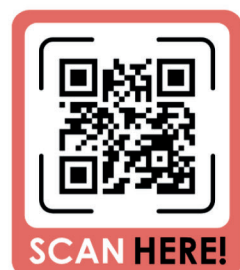
WE OFFER:

- WEBINARS
- ON-DEMAND LIBRARIES
- RESOURCE KITS
- IN-PERSON IMMUNIZATION PROGRAMS

**FREE PEER-TO-PEER EDUCATION
TO HELP KEEP YOU UP TO DATE!**

EARN CME/CNE CONTACT HOURS!

Visit gaepic.org for more info
or scan the QR code!



American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™
Georgia Chapter



Update of School-based Health Centers in Georgia



Veda Johnson
MD



Yuri Okuizumi-Wu
MD

Children learn best when they are healthy. School-based health centers (SBHC) effectively provide integrated medical, behavioral and dental care at schools, where students spend the majority of their time. SBHCs can readily address the barriers of cost, transportation, scheduling, and parental work commitments, along with the lack of knowledge around how to manage one's health and when to access care. By increasing access to healthcare, SBHCs also improve school attendance and academic achievement. They are especially valuable for decreasing disparities among children living in poverty, children of color, and children living in health professional shortage areas.

The first SBHCs in the United States were started in the late 1960s and early 1970s in Boston, Minnesota, and Texas. By 2022, there were over 3,900 SBHCs across the country in all 50 states. SBHC models vary, with most located on fixed sites on school campuses and in modular buildings on school grounds. Others are at school-linked sites in buildings near a school or mobile vehicles that travel to multiple schools. Since the COVID-19 pandemic, the number of telehealth-exclusive centers has increased, especially in rural areas. The patients SBHCs serve range from students attending the schools to siblings of students and school staff and the entire community, including adults. SBHCs also may contribute to an improved school climate for the entire student body with school-wide health promotion activities. They often support additional social needs such as food and housing, legal assistance, safety, and insurance enrollment.

Georgia's first comprehensive SBHC, the Whiteford Elementary School-based Health Center, was established in 1994 by Emory University School of Medicine's Department of Pediatrics. A second SBHC followed at Coan Middle School, and for over 18 years, these were the only two in Georgia, both in Atlanta's Edgewood neighborhood. Since 2013, Emory's PARTNERS for Equity in Child and Adolescent Health Program has worked with school districts and medical sponsors to expand SBHCs statewide, resulting in more than 120 centers in 39 counties, serving over 70,000 students. During the COVID-19 Pandemic, the relationship between health and education became much more significant and apparent. Despite the significant challenges of keeping SBHCs open while schools were closed, SBHCs are now thriving, and they continue to advance health equity in Georgia.

In 2022, Governor Brian Kemp allocated an unprecedented \$125 million to expand SBHCs, aiming to increase healthcare access for children in under-resourced communities and improve academic outcomes in Georgia's lowest-performing schools. Currently, 30 grantees of this funding are in various stages of planning and starting SBHCs under the guidance of Georgia's Department of Education and the technical support of the Georgia School-based Health Alliance (GASBHA).

Pediatricians are encouraged to explore how they support SBHCs. They can facilitate the development of these centers through the planning process, provide guidance on school health in collaboration with the SBHC team, or serve as a medical sponsor. Sponsors coordinate care with other medical providers in the community, especially for those

students who already have a medical home. For pediatricians, the SBHC can serve as an extension of their practice and increase access to their existing patient panel.

We have found that caring for our youth in school-based health centers has been extremely productive and rewarding and invite you to become involved.

They often support additional social needs such as food and housing, legal assistance, safety, and insurance enrollment.

Veda Johnson, MD

Professor of Pediatrics, Emory University School of Medicine Director, PARTNERS for Equity in Child and Adolescent Health Chair, Committee on School Health, Georgia AAP

Yuri Okuizumi-Wu, MD

Assistant Professor, of Pediatrics, Emory University School of Medicine Vice-chair, Committee on School Health, Georgia AAP Member, Executive Committee, AAP Council on School Health

Source: https://www.gadoe.org/wholechild/SiteAssets/WholeChild_SBHC_MAP/Index.html

School Health Committee - There are now over 120 School-based Health Centers in Georgia! The School Health Committee has created a new toolkit on how pediatricians can become involved with School-based Health Centers. To visit the toolkit please scan the QR code below or go to gaaap.org and choose Resources.

Visit our toolkit to learn more:



Georgia Pathways Offers Health Coverage for Adults

(Editor's Note: The following article was submitted by the Georgia Department of Community Health to provide more information to pediatricians about the state's Pathways program, which provides healthcare coverage to eligible adults in Georgia.)

Georgia Pathways to Coverage ("Pathways") is a Medicaid eligibility category for adults 19 or older in Georgia that launched in July 2023. Pathways seeks to increase access to affordable, quality healthcare coverage, lower the uninsured rate across Georgia, support participating members on their journeys to financial independence, and promote members' transitions from Medicaid into private coverage.

As a trusted pediatrician in Georgia, you are often a first point of contact for Georgians who may be aging out of PeachCare for Kids or for uninsured and underinsured low-income parents. We hope that by promoting this program and enrolling more Georgians in healthcare coverage, we can play a part in increasing access to affordable healthcare, and promoting financial stability for healthcare providers, hospital systems, and the state. Please see below for a full list of eligibility criteria.

To be eligible for Pathways, an applicant should:

- Be a Georgia resident
- Be a U.S. citizen or legally residing non-citizen
- Be between 19 and 64 years of age

- Have a household income of up to 100% of the Federal Poverty Level (FPL). For example, in 2024, this equals:
 - \$15,060 per year or \$1,255 on average per month for one person
 - \$25,820 per year or \$2,151 on average per month for a family of three
- Prove that you are doing at least 80-hours of qualifying activities per month
- For Pathways applicants fulfilling the requirement through higher education, current college course-load credit hours will be granted qualifying activity hours as following:
 - At least 11.5 credit hours will count as 80 hours per month
 - Between 5.50 and 11.49 credit hours will count as 40 hours per month
 - Between 0.01 and 5.49 credit hours will count as 20 hours per month
- Not qualify for any other type of Medicaid
- Not be incarcerated

Georgians can apply through the Gateway Customer Portal online at gateway.ga.gov. If you are interested in learning more or would like Georgia Pathways informational resources for your office, please reach out to the Pathways outreach team at georgia.pathways@dch.ga.gov.



Physicians' Alliance of America

SAVE ON VACCINES

Physicians' Alliance of America (PAA) is a nonprofit Group Purchasing Organization that uses the purchasing power of more than 10,000 member practices nationwide to negotiate discounts and preferred terms for the products and services practices use every day.

- ◊ Free Membership
- ◊ Best Prices on Vaccines
- ◊ Vaccine Rebate Program
- ◊ Savings with Quality Vendor Partners
- ◊ Superior Customer Service

Join Today!

PhysiciansAlliance.com/join
866-348-9780



GA Pediatric Practices Successfully Expand Their Screening Practices



Jennifer Zubler
MD

Early childhood screenings began in the 1960's with newborn metabolic screening. Today, well visits include universal and selective screenings per the American Academy of Pediatrics (AAP) Bright Futures Periodicity Schedule. Collaborations with the Georgia Department of Public Health, Community Health, Behavioral Health & Developmental Disabilities, and Bright from the Start Georgia Department of Early Care & Learning to improve screenings and identify resources for children and families have been helpful as pediatricians now screen for perinatal depression, social-emotional concerns, depression, and suicide risk.

Chapter led quality improvement projects have aided GA pediatricians in managing the complex patient by addressing & documenting factors that influence a patient's health status through Z-codes. One such project was the Addressing Social Health and Early Childhood Wellness (ASHEW) project, an extension of the earlier Ga AAP's Bright Futures Quality Improvement Project. It demonstrated Georgia pediatricians' ability to further

expand their screening programs/protocols to attain high rates of surveillance, discussion and documentation of results, timely referrals for concerns, and closure of referral loops, to achieve practice transformation and improve patient outcomes.

During the uncertainty of the COVID pandemic, 14 pediatric practices and training programs participated in this learning collaborative with 52 other practices from 7 AAP state Chapters.¹ Participating pediatricians were tasked with improving and expanding their already successful autism and developmental screening, perinatal depression screening, and Social Determinants of Health (SODH) screening. They were also encouraged to increase their screening and discussion of social emotional concerns, identify family strengths, and implement a "close the loop" referral system.

In their recently published article, Early Childhood Screening Practices and Barriers: A National Survey of Primary Care Pediatricians,

During the uncertainty of the COVID pandemic, 14 pediatric practices and training programs participated with 52 other practices from 7 AAP state Chapters.



Children'sSM
Healthcare of Atlanta
Cardiology

With more than 50 pediatric cardiologists in more than 20 locations across the state, Children's Healthcare of Atlanta Cardiology clinics provide accessible outpatient care for your patient's cardiology needs.



404-256-2593



www.choa.org/heart



ChildrensCardiology



ChildrensCardiology

Screening Practices

Continued from previous page.

authors Coker et al. looked at 2019 national periodic survey data (self-reported) on surveillance, screening with validated screening tools, and barriers faced for early childhood screenings. This national periodic survey showed “Most pediatricians reported screening/surveilling for developmental delay (98.1%), maternal depression (83.2%), and SDOH (76.7%).” In comparison, when asked if they used a standardized screening tool, the national self-reported percentages fell to 59.0%, 44.9%, and 12.6%, respectively.

The ASHEW chart data at baseline and the duration of the project demonstrates that GA pediatricians can and do achieve high levels of early childhood screening within various sized pediatric medical homes, insurance plans, and geographic locations. Averaged data showed that GA practices increased perinatal depression screening from ~90% to 100%; increased SDOH from ~70 to 85%; but were stable in their social-emotional screening from their 60% baseline. GA pediatricians significantly out screened in all three areas from baseline to the end of the learning collaborative.

Similar to the Lipkin and Coker study, the GA-ASHEW project identified potential improvements in implementation of universal early childhood screenings including education on SDOH screenings, incorporation of screenings into EHRs, tracking of referral completion, and knowledge of local resources. It also supported the development

and coordination of more community resources/service providers, and innovative care models using nonclinical professionals in the care team to address developmental and social needs.

It is important to advocate for adequate payment for primary care pediatricians to improve early childhood surveillance and screening in the pediatric medical home. Expanding our efforts to improve access to referral resources and concrete community support is a natural next step to ensuring screening efforts result in healthy early relational health in a safe, stable, and nurturing environment for children.

1. <https://www.aap.org/en/patient-care/early-childhood/early-relational-health/addressing-social-health-and-early-childhood-wellness-initiative-ashew/ashew-quality-improvement-learning-collaborative-qilc/>

Coker TR, Gottschlich EA, Burr WH, Lipkin PH. Early Childhood Screening Practices and Barriers: A National Survey of Primary Care Pediatricians. *Pediatrics*. 2024 Aug 1;154(2):e2023065552. doi: 10.1542/peds.2023-065552. PMID: 39034835.

Thank you to GA pediatric practices who participated in ASHEW project

Jennifer Zubler, MD
Co-Physician Project Lead ASHEW QI Project

Children 1st	Single point of entry for all DPH Child Health programs (Babies Can't Wait; Children's Medical Services; Home Visitors; and more)	https://dph.georgia.gov/serviceschildren1st
Help Me Grow	Free self-referral line providing information, healthcare referrals, and follow-up services for children birth-8yo	888-HLP-GROW, 1-888-457-4769
Find Help Georgia	Connects families, based on their zip code, to information on financial assistance, food pantries, childcare, and other free/reduced-cost services	www.findhelpga.org
GA DECAL	Georgia Department of Early Care and Learning Bright from the Start	www.decgal.ga.gov
CDC's Learn the Signs. Act Early program	Free Resources to support developmental surveillance and more	www.cdc.gov/Actearly
AAP	Developmental surveillance and Screening Resources for Pediatricians webpage	Developmental Surveillance Resources for Pediatricians (aap.org) found on patient-care tab of aap.org
	ASHEW project information and resources	ASHEW Quality Improvement Learning Collaborative (QILC) (aap.org) found on patient-care tab of aap.org
	S.T.A.R. Center screening resources including the “Screening Tool Finder” and recorded webinars for CME credit	Screening Technical Assistance and Resource (STAR) Center (aap.org)

Resources for GA Pediatricians for Early Childhood Surveillance and Screening



Physician Wellness Committee Update



Michelle Kelly
MD, 200H-RYT, MBSR

Are you curious about meditation or mindfulness? Would you like to learn more about these concepts and practices from a fellow GA pediatrician? My first offering for the GA AAP was an introduction to mindfulness course in the spring. I will now offer the full MBSR (mindfulness-based stress reduction) curriculum. MBSR is an evidence-based intensive 8-week program that was developed at the University of Massachusetts Medical Center. The course will take place on Tuesday evenings from 6-8:30 pm via Zoom over the span of 8 weeks starting 9/10/24 and ending 10/29/24. A day of silent mindfulness from 9 am through 4 pm on Saturday October 19th is an essential part of this curriculum. There is no fee for this course although I encourage donations to a mental health/suicide prevention organization of your choice. My recommendations are Will to Live Foundation, NAMI (National Association for Mental Illness) and Covenant House. Addressing the mental health of our youth is the reason I became a yoga instructor, and then went on to pursue mindfulness teaching accreditation. The Zoom link will be provided

upon registration. Space is limited as this is a participatory experience. Please email mbsrwithdrnichelle@gmail.com if you would like to register.

BIO: Michelle Kelly is a private practice pediatrician and a certified yoga & mindfulness instructor. She has completed a 2-year teacher training program in mindfulness based stress reduction (MBSR). MBSR is the meditation modality most cited in PubMed. Michelle has taught yoga in a studio, on retreat and in the mindfulness courses that she provided from 2022 through 2024.

Michelle Kelly, MD, 200H-RYT, MBSR
Pediatric Physicians, PC
www.PediatricPhysiciansPC.com

LEGISLATIVE DAY 2025

AT THE CAPITOL

FLOYD VETERANS MEMORIAL BUILDING
AND THE GEORGIA STATE CAPITOL



THURSDAY,
FEBRUARY 13, 2025



Georgia Chapter
American Academy of Pediatrics

*Georgia's leading voice for children and the
pediatricians & subspecialists who care for them.*

Join Us!

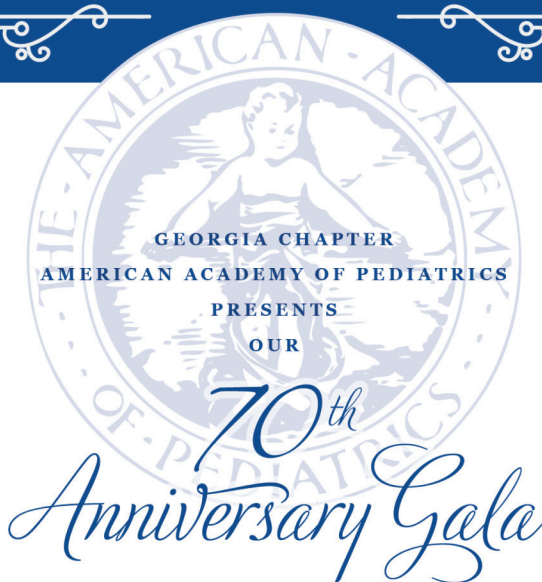
AS WE CELEBRATE THE CHAPTER'S 70TH BIRTHDAY

The Event will feature a Buffet Dinner, Silent Auction, Wine Wall, 360 Video Booth, and a 1 hr program with Entertainment.

Make a donation in
honor of the 70th
Anniversary Gala!



Purchase your
tickets today!



BENEFITTING THE
PEDIATRIC FOUNDATION OF GEORGIA

SATURDAY

26

OCTOBER

2024

6:30 PM – 9:30 PM

RENAISSANCE WAVERLY HOTEL

ATLANTA, GEORGIA

For Sponsorships and Table purchases please email
jcaceres-aponte@gaaap.org

Georgia Chapter

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN®



1350 SPRING ST, NW, SUITE 700
ATLANTA, GA 30309

Prsrt Std
U.S. Postage
PAID
Atlanta, GA
Permit 2295



Looking Ahead: Join us for our upcoming events!

● **2024 Fall Meeting**
**Pediatrics on the Parkway
& 70th Anniversary Gala**
October 24 – 26, 2024
Cobb Galleria Centre
Atlanta

● **Legislative Day at the Capitol**
February 13, 2025
State Capitol
Atlanta

● **Pediatrics by the Sea**
June 11-14, 2025
Ritz-Carlton Hotel
Amelia Island, Fla.

The Georgia Pediatrician is the newsletter of the Georgia Chapter/American Academy of Pediatrics

Editor: Alice Little Caldwell, MD | Email: acaldwel@augusta.edu



@ Georgia Chapter of the American Pediatrics



@ GAChapterAAP

1350 Spring St, NW, Suite 700, Atlanta, Ga 30309 | P: 404.881.5020 F: 404.249.9503

The Georgia Chapter of the American Academy of Pediatrics is incorporated in the state of Georgia.

Visit the Chapter Website for details on Chapter events. www.GAaap.org
Call (404) 881-5020 for more information.