



AAP-CA2 34th Annual Advances in Pediatrics Symposium

Sponsored By UCLA Child And Family Health Leadership Training Program

2023 Symposium Pearls

Thank you for attending the AAP-CA2 34th Annual Advances in Pediatrics Symposium, hosted in person at UCLA's Carnesale Commons on May 20, 2023. In this document you will find the conference Pearls - a compilation of takeaway points submitted by each speaker. Please review the entire document, then access the [Reflective Statements](#) exercise to provide your responses. Reviewing these Pearls, followed by completion of the Reflective Statements meets compliance with the American Board of Pediatrics requirement for MOC Part 2 credit. Deadline for completion is 7/31/2023.

Gender-Affirming Care: The Role of the Pediatrician - Jonathan Warus, MD, FAAP



Pearl 1: Pediatricians play a vital role in screening youth for gender-related concerns during primary care visits as well as in normalizing diverse gender identity/expression and providing families with reassurance, validation, and referrals for additional support. The American Academy of Pediatrics and Bright Futures recommend discussing the differences between assigned sex at birth and gender identity development with parents of those < 12 months of age as well as beginning to discuss and explore gender identity with all youth beginning at 4-5 years of age. Beginning at 8 years of age, pediatricians are also recommended to assess a patient's understanding and feelings toward emerging puberty to identify any potential concerns for gender dysphoria.

Pearl 2: Social transition is the process of making changes within different areas of social interaction (such as name, pronouns, hairstyle, clothing, activities, etc.) to decrease distress around gender. The decision of whether to pursue social transition is unique to each patient and family. The goal of this process is to allow youth to explore these changes in an effort to decrease the distress they experience in social interactions. Youth should be centered in this process and be the leader of any potential changes with parents and schools providing safe and supportive environments. Social transition has been shown to decrease rates of depression in gender diverse youth to the same level as that of their cisgender peers.

Pearl 3: There are no recommended medical interventions for gender-affirming care before the time of puberty and, once a patient reaches Sexual Maturity Rating II, the first potential treatment

option is the reversible blocking of puberty. The goal of support prior to puberty is for youth to grow and thrive as any other child and to not have gender dysphoria get in the way of normal development and social functioning. The first medical treatment option offered to families at the onset of puberty is the reversible suppression of pubertal development using gonadotropin-releasing hormone (GnRH) analogs.

References

1. Rafferty J, AAP Committee on Psychosocial Aspects of Child and Family Health, AAP Committee on Adolescence, AAP Section on Lesbian, Gay, Bisexual, and Transgender Health and Wellness. Ensuring Comprehensive Care and Support for Transgender and Gender-Diverse Children and Adolescents Pediatrics. 2018;142(4):e20182162.
2. Bright Futures Gender/Sexuality Tip Sheet.
3. Olson KR, Durwood L, DeMeules M, et al. Mental Health of Transgender Children Who Are Supported in Their Identities. Pediatrics. 2016;137(3):e20153223.
4. Ehrensaft D, Giammattei SV, Storck K, et al. Prepubertal Social Gender Transitions: What We Know; What We Can Learn – A View from a Gender Affirmative Lens. Int J Transgend. 2018;19(2):251-268.
5. Vance, SR, Ehrensaft D, Rosenthal SM. Psychological and Medical Care of Gender Nonconforming Youth. Pediatrics. 2014;134(6):1184-1192.
6. Olson J, Forbes C, Belzer M. Management of the Transgender Adolescent. Arch Pediatr Adolesc Med. 2011;165(2):171-176.

The Crisis in Adolescent Girls' Mental Health: How Lifestyle Psychiatry Can Help - Cheryl Green, MD, PHD



Pearl 1: Prescribing SMART lifestyle goals for your patients – i.e., prescriptions for lifestyle changes that are specific, measurable, achievable, realistic, and time-bound – helps patients to achieve those goals.

Pearl 2: As little as one hour of physical activity each week can be protective against depressive symptoms.

Pearl 3: Eating the whole food plant-based diet, in which at least 90% of the diet derives from plants, reduces depression scores.

References

1. Lifestyle Medicine, Third Edition. Ed. Rippe JM. NY, NY: CRC Press, Taylor & Francis Group, 2019, pp. 270, 274.
2. Harvey SB, Overland S, Hatch SL, et al. Exercise and the prevention of depression: Results of the HUNT study. American J Psychiatry 175(1): 28 – 36, 2018.
3. Agarwal U, Mishra S, Xu J, Levin S, Gonzales J, and Barnard ND. A multicenter randomized controlled trial of a nutrition intervention program in a multiethnic adult population in the corporate setting reduces depression and anxiety and improves quality of life: The GEICO study. Am J Health Promot. 2015 Mar – Apr; 29(4): 245 – 54.

The New Infection Prevention: Pediatricians and Possibilities Post-COVID - Ken Zangwill, MD, FAAP



Pearl 1: Healthcare-associated infection minimization is the expectation.

Pearl 2: Disinfection devices/technology outperform human efforts.

Pearl 3: Few data support the use of Contact Precautions and harms occur.

Healthy Air For Healthy Kids - Catherine J. Karr, PhD, MD, MS



Pearl 1: Exposure to traffic related air pollutants falls off sharply with distance from busy roadways. At least 500 feet away is a recommended distance for places where children spend significant amounts of time.

Pearl 2: The Air Quality Index is an easily accessible and understandable tool that provides information on local air quality conditions. It can be used to educate patients to inform decisions about potential behavior change when air quality is poor.

Pearl 3: Indoor air filtration is a useful way to reduce overall exposure to air pollutants in the home environment. Increasing the efficiency of the filter used on home central ventilation/cooling systems to a MERV 13 (or higher number) or by using a portable HEPA air cleaner are two approaches to improving indoor air quality.

References

1. https://www.epa.gov/sites/default/files/2015-11/documents/420f14044_0.pdf
2. [https://www.epa.gov/pmcourse/patient-exposure-and-air-quality-index#:~:text=AQI%20values%20at%20and%20below,higher%20\(greater%20than%20150\)](https://www.epa.gov/pmcourse/patient-exposure-and-air-quality-index#:~:text=AQI%20values%20at%20and%20below,higher%20(greater%20than%20150))
3. <https://ww2.arb.ca.gov/resources/fact-sheets/air-cleaning-devices-home>

From SoCal to Sacramento: Updates of Advocacy - Kamaal A. Jones, MD, FAAP



Pearl 1: In 2023, AAP-CA2 focuses on three advocacy efforts (A result from the 2022 Advocacy Survey sent to all members) 1.Behavioral and Mental Health, 2.Child Poverty and Related Programs, and 3.Childcare/Early Childhood Education (ECE)

Pearl 2: The current priority bills may be found by visiting our advocacy page: <https://aapca2.org/legislative-priorities/>

Pearl 3: Wins for kids in the May Budget Revise:

- Managed Care Organization (MCO) tax renewed à \$11.1 billion increase for Medi-Cal (including rate increases for primary care, birthing care, and mental health to at least 87.5% of Medicare rates)
- One time increase of \$15 million for 988 Mental Health centers
- \$300 million for Universal School Meals program
- \$200 million was to waive childcare family fees until September 30th + increased funding for childcare workers

The AAP-CA2 Advocacy Committee Meets regularly via Zoom.

Please email kamaaljones.aap@gmail.com if you would like to take part in this advocacy effort.

Tobacco/Vaping Use Among Youth - Hannah Kwak, MD, FAAP



Pearl 1: Early exposure to nicotine in adolescents increases the risk of forming addictions – Nicotine can exert neurotoxic effects in the prefrontal cortex, which is important for behavioral control and cognitive functioning.

Pearl 2: Adolescents that vape are at risk for impaired lung development and cardiovascular disease later in life – Long term electronic cigarette is associated with oxidative stress and changes in local inflammatory cell counts.

Pearl 3: Flavors in tobacco products can drive use in youth – Surveys among adolescents noted increased willingness and likelihood of continued vape use if the product was flavored.

References

1. Goriounova NA, Mansvelder HD. Short- and long-term consequences of nicotine exposure during adolescence for prefrontal cortex neuronal network function. *Cold Spring Harb Perspect Med*. 2012;2(12):a012120. Published 2012 Dec 1. doi:10.1101/cshperspect.a012120
2. Wold LE, Tarran R, Crotty Alexander LE, et al. Cardiopulmonary Consequences of Vaping in Adolescents: A Scientific Statement From the American Heart Association. *Circ Res*. 2022;131(3):e70-e82. doi:10.1161/RES.0000000000000544
3. Leventhal AM, Goldenson NI, Cho J, et al. Flavored E-cigarette Use and Progression of Vaping in Adolescents. *Pediatrics*. 2019;144(5):e20190789. doi:10.1542/peds.2019-0789

Utilization Management, Cost, Reimbursement In An Era Of Financial Constraint - Anthony Moretti, MD, MBA, FAAP



Pearl 1: HCC (Hierarchical Condition Codes) are groups of common billing diagnosis codes that are risk adjusted to generate annual cost. These HCC codes are also used by InterQual to determine "Level of Care" needs and Medical Necessity for Health Plan Payment.

Pearl 2: Independent Contractor Compliance Agreements cannot specify when, where, or how to do the job and generally no instructional training. The job fulfilled provides key services for a business or term of contract.

Pearl 3: Stark II was Amended by the Omnibus Budget Reconciliation Act of 1993, broadened the physician self-referral prohibition to include “designated health services”- PT, speech-language, occupational, radiology/imaging, DME, parenteral nutrition, HHS, prosthetics, inpatient and outpatient referrals.

Hot Topic: Interpreting and Applying the AAP Febrile Infant Clinical Practice Guidelines - Jennifer Savitz, MD, FAAP



Pearl 1: When risk stratifying febrile infants, inflammatory markers should be interpreted together for optimal sensitivity.

The AAP Febrile Infant Guidelines consider the following 4 inflammatory markers when risk-stratifying febrile infants age 22-28 and 29-60 days old: maximum temperature (abnormal if >38.5C), absolute neutrophil count (abnormal if >4000 or 5200 depending on study referenced), C-reactive protein (abnormal >2mg/dL), and procalcitonin (abnormal >0.5 ng/mL). No inflammatory marker is sufficiently sensitive to be interpreted alone to "rule out" invasive bacterial infection. For example, 30% of febrile infants with IBI have a maximum temperature less than or equal to 38.5C

and, in another large prospective study, 20% of febrile infants with bacterial meningitis had normal procalcitonin.

Pearl 2: 3 age-based clinical algorithms were developed for evaluation of well-appearing febrile infants (8-21 days, 22-28 days, 29-60 days) due to population data suggesting that infants had decreasing risk of bacteremia in each subsequent age group. Observational studies conducted by PROS network, FYIRC, PECARN, and Intermountain Healthcare System have shown that there is a statistically significant difference in rates of bacteremia based on infant age. When data were pooled together, 22-28 day old infants had a significantly lower rate of bacteremia than 8-21 day old infants, which justified the development of 3 separate age-based algorithms for evaluation of febrile infants.

Pearl 3: When creating clinical practice guidelines, the AAP assigns each recommendation a grade and strength based on quality of supporting evidence and balance of risk and benefit. A 2004 AAP Steering Committee developed standards to grade recommendations presented in clinical practice guidelines. The standardized process involves assigning a letter grade (A-D, X) and a strength (strong, moderate weak, no recommendation). The letter grade depends on the strength of supporting evidence (including rigor of studies, similarity of sample to target population, any major study flaws), and the strength of the recommendation depends on magnitude and likelihood of possible risks/benefits of the recommendation. Evidence grade X includes recommendations that are difficult or unethical to study (often due to established preponderance of significant benefit or harm).

References

1. Pantell, Robert H., Kenneth B. Roberts, William G. Adams, Benard P. Dreyer, Nathan Kuppermann, Sean T. O'Leary, Kymika Okechukwu, and Charles R. Woods. "Evaluation and Management of Well-Appearing Febrile Infants 8 to 60 Days Old." *Pediatrics*, August 1, 2021. <https://doi.org/10.1542/peds.2021-052228>.

2. Gomez B, Mintegi S, Bressan S, Da Dalt L, Gervais A, Lacroix L; European Group for Validation of the Step-by-Step Approach. Validation of the “Step-byStep” approach in the management of young febrile infants. *Pediatrics*. 2016;138(2):e20154381
3. Michelson KA, Neuman MI, Pruitt CM, et al; Febrile Young Infant Research Collaborative. Height of fever and invasive bacterial infection [published online August 20, 2020]. *Arch Dis Child*. 2021;106(6):594–596. doi:10.1136/archdischild-2019-318548
4. Pantell RH, Newman TB, Bernzweig J, et al. Management and outcomes of care of fever in early infancy. *JAMA*. 2004;291(10):1203–1212
5. Powell EC, Mahajan PV, Roosevelt G, et al; Febrile Infant Working Group of the Pediatric Emergency Care Applied Research Network (PECARN). Epidemiology of bacteremia in febrile infants aged 60 days and younger. *Ann Emerg Med*. 2018;71(2):211–216
6. Aronson PL, Thurm C, Alpern ER, et al; Febrile Young Infant Research Collaborative. Variation in care of the febrile young infant <90 days in US pediatric emergency departments. *Pediatrics*. 2014;134(4):667–677
7. Blaschke AJ, Korgnski EK, Byington CL. Meningitis in well-appearing febrile infants aged 1–90 days. *Open Forum Infect Dis*. 2018;5(suppl 1):S133 (data obtained from supplemental findings from primary research study)
8. American Academy of Pediatrics Steering Committee on Quality Improvement and Management. Classifying recommendations for clinical practice guidelines. *Pediatrics*. 2004 Sep;114(3):874-7. doi: 10.1542/peds.2004-1260. PMID: 15342869.

The Journey of Undocumented, Latinx Immigrant Youth: Mental Health Considerations - Natalie Cruz, PSY.D.



Pearl 1: Each year, there has been an increasing number of unaccompanied minors migrating to the United States with Los Angeles being the second highest county where minors are released to relatives and/or sponsors.

Pearl 2: Undocumented, Latinx youth may be likely to have been exposed to adverse childhood experiences before, during, and after migrating to the United States, which increases the likelihood of poor outcomes and health risk behaviors.

Pearl 3: Mental health treatment and various resilience factors (individual factors, lifetime relationships, acculturation, and care arrangements) can buffer the impact of trauma and support migrant youth’s ability to adapt and thrive in the U.S.

References

1. American Psychological Association: Crossroads (2012): The Psychology of Immigration in the New Century
2. California Psychological Association (2018): Recommendations for Psychological Practice with Undocumented Immigrants in California
3. Migration Policy Institute (2023): A Path to Meeting the Medical and Mental Health Needs of Unaccompanied Children in U.S. Communities

Contracts 101 - Anthony Moretti, MD, MBA, FAAP



Pearl 1: A contract is an Enforceable Promise and Risk Allocation Mechanism

Offer where each party must promise to provide something of value.

Pearl 2: The usual contract terms and conditions are descriptions of goods, services, payment terms, terms and termination of agreement. Special terms can include without limitation, indemnification, warranty, limitation of liability.

Pearl 3: Essential Elements of a Physician Employment Agreement include:

- Duties
- Full time employment
- Permitted Activities – outside if any,
- Employer's Right to Possession of Revenue from Medical Services
- Employee Representations and Warranties. - protect the employer
- Licensure
- DEA License
- Staff Privileges
- Criminal Misconduct
- General Conduct History

Hyperbilirubinemia Guidelines - Mitchell Goldstein, MD, FAAP



Pearl 1: Risk factors for a newborn developing significant hyperbilirubinemia include: 1) Lower gestational age. Risk increases with each week less than 40 wk. 2) Jaundice in the first 24 h after birth. 3) PredischARGE transcutaneous bilirubin (TcB) or total serum bilirubin (TSB) concentration close to the phototherapy threshold.

Pearl 2: Risk factors for a newborn with hyperbilirubinemia developing neurotoxicity include: 1) Gestational age <38 wk (This risk increases with the degree of prematurity. 2) Albumin <3.0 g/dL. 3) Sepsis or significant clinical instability in the previous 24 hours.

Pearl 3: Escalation of care refers to the intensive care that some infants with elevated or rapidly increasing bilirubin concentrations need to prevent the need for an exchange transfusion and possibly prevent kernicterus. Care should be escalated when an infant's TSB reaches or exceeds the escalation-of-care threshold, defined as 2 mg/dL below the exchange transfusion threshold.

References

1. <https://publications.aap.org/pediatrics/article/150/3/e2022058859/188726/Clinical-Practice-Guideline-Revision-Management-of?autologincheck=redirected>

Media Training: Getting Your Message Out - Strategies for Effective Messaging - Corinn Cross, MD, FAAP



Pearl 1: Interviews should not be a reactive situation. A good interview requires proper prep work.

Pearl 2: Physicians and other healthcare workers have a unique job when giving an interview; they need to utilize the opportunity to craft a message and deliver meaningful information to the public.

Pearl 3: Pivoting is a technique that can be used if an interviewer asks a question or makes a statement that for whatever reason you don't feel should be answered exactly how it was asked. Pivoting phrases include: "Great question, and what's most important," "I am not aware of that, but what I do know," "I wouldn't put it that way exactly, but what I would say is," "More importantly," "Keep in mind."

Negotiation & Alignment With Health Insurance Companies - Anthony Moretti, MD, MBA, FAAP



Pearl 1: Accept value-based risk and improve relationship with payers moving into your space and Align incentives to allow hospitals to share in some of the gains and reduce utilization. This can include optimizing low-cost sites of care- ASC, Urgent Care.

Pearl 2: Define a DOFR and Risk Corridor
Describe how integration of data metrics can leverage alignment with health payors.

Pearl 3: Consider a professional services agreement partnership for clinical services. Update provider needs assessments to identify specialties that the hospital may need to expand in the coming years- consider employment/increased alignment with these providers to further growth strategies

My child needs help! What do I do now? – How to handle psychiatric emergencies - Janet Charoensook, MD



Pearl 1: Dehydration, electrolyte disturbances, EKG abnormalities, and physiologic instability are among several indications that justify the hospitalization of an adolescent with an eating disorder. According to the Society for Adolescent Health and Medicine, the indications for hospitalizing an adolescent with an eating disorder includes: $\leq 75\%$ median BMI for age and sex, dehydration, electrolyte disturbances, ECG abnormalities, physiologic instability, arrested growth and development, failure of outpatient treatment, acute food refusal, uncontrollable binge eating and purging, acute medical complications of malnutrition, comorbid

psychiatric or medical condition that prohibits or limits appropriate outpatient treatment.

Pearl 2: Between 2019-2022, the weekly number of emergency department visits associated with tics among adolescent girls increased. There was an increase in ED visits for tics. This condition is comorbid with depression, anxiety, and OCD. Tics are usually present in boys at a younger age, so it is unusual for the increase in visits for tic disorders for adolescent girls. This may possibly be related to stress of the pandemic or social media highlighting the disorder on its platforms.

Pearl 3: Having a firearm in the home increases the likelihood of completing suicide by the firearm. Studies have shown that having a firearm in the home increases the risk of completing suicide by the firearm. Individuals with firearms locked or unloaded or both were less likely to die by suicide than those who had firearms unlocked and loaded.

References

1. Laurie L. Hornberger, Margo A. Lane, THE COMMITTEE ON ADOLESCENCE, Laurie L. Hornberger, Margo Lane, Cora C. Breuner, Elizabeth M. Alderman, Laura K. Grubb, Makia Powers, Krishna Kumari Upadhy, Stephenie B. Wallace, Laurie L. Hornberger, Margo Lane, MD FRCP, Meredith Loveless, Seema Menon, Lauren Zapata, Liwei Hua, Karen Smith, James Baumberger; Identification and Management of Eating Disorders in Children and Adolescents. *Pediatrics* January 2021; 147 (1): e2020040279. 10.1542/peds.2020-040279
2. Radhakrishnan L, Leeb RT, Bitsko RH, et al. Pediatric Emergency Department Visits Associated with Mental Health Conditions Before and During the COVID-19 Pandemic — United States, January 2019–January 2022. *MMWR Morb Mortal Wkly Rep* 2022;71:319–324. DOI: <http://dx.doi.org/10.15585/mmwr.mm7108e2>.
3. Shenassa ED, Rogers ML, Spalding KL, Roberts MB. Safer storage of firearms at home and risk of suicide: a study of protective factors in a nationally representative sample. *J Epidemiol Community Health*. 2004;58(10):841-848. doi:10.1136/jech.2003.017343

Reproductive Health: "Now That Roe Is Gone" - Sophia Yen, MD, MPH



Pearl 1: For BMI of 30 or more, Levonorgestrel emergency contraception does not work. explanation: research has shown that for those with BMI 30 or greater, levonorgestrel emergency contraception is as good as placebo in preventing unplanned pregnancy.

Pearl 2: It is recommended that those with uteri consider 30 mcg of estrogen in their OCPs until 30 years of age for their bone health. explanation: research has shown lower bone density in those on <30 mcg of estrogen in their OCP. Adolescents through 30 -35 years old are when young women build their bone density.

Pearl 3: Phexxi is a non hormonal birth control that is expensive and does not have much better efficacy than spermicide. explanation: it doesn't have hormones in it. It's efficacy is 15% pregnancy rate vs. spermicide's 21 %. It's \$353 for 12 doses.

References

1. *Obstet Gynecol*. 2022 Jul; 140(1): 48–54. Double Dosing Levonorgestrel-Based Emergency Contraception for Individuals With Obesity

2. J Pediatr Adolesc Gynecol. 2016 Dec; 29(6):635-642. doi: 10.1016/j.jpag.2016.05.012. Epub 2016 Jun 7. Effect of Extended 30 µg Ethinyl Estradiol with Continuous Low-Dose Ethinyl Estradiol and Cyclic 20 µg Ethinyl Estradiol Oral Contraception on Adolescent Bone Density: A Randomized Trial.
3. <https://www.plannedparenthood.org/learn/birth-control/spermicide/phexxi> contraceptive technology 21st edition cost: <https://www.goodrx.com/phexxi>

Resident Research Awards and Presentation

Adolescent and Young Adult Onset Glomerular Disease Outcomes, the Social and Clinical Implications - Kelly Garritty, MD, FAAP



Pearl 1: Chronic Kidney Disease impacts neurocognition – Altered renal clearance leads to uremia which negatively impacts brain development and children with chronic illness have higher rates of chronic absenteeism from school.

Pearl 2: Later stage Chronic Kidney Disease can impact fertility in both males and females – Uremia alters levels of prolactin, FSH, LH, testosterone, and other hormones.

Pearl 3: Patients with FSGS are at higher risk for progression to End Stage Kidney Disease than those with Minimal Change Disease or IgA Nephropathy, and even children may progress to End stage kidney disease within 5 years of these diagnoses.

References

1. Hooper SR, Gerson AC, Butler RW, et al. Neurocognitive Functioning of Children and Adolescents with Mild-to-Moderate Chronic Kidney Disease. Clin J Am Soc Nephrol. 2011;6(8):1824-1830. doi:10.2215/CJN.09751110
2. Dumanski SM, Ahmed SB. Fertility and reproductive care in chronic kidney disease. J Nephrol. 2019;32(1):39-50. doi:10.1007/s40620-018-00569-9
3. Chou YH, Lien YC, Hu FC, et al. Clinical outcomes and predictors for ESRD and mortality in primary GN. Clin J Am Soc Nephrol CJASN. 2012;7(9):1401-1408. doi:10.2215/CJN.04500511

MOC Part 2 Credit Completion Instructions **For conference attendees only**

Please click below to access the Reflective Statements exercise to provide your responses. Reviewing these Pearls, followed by completion of the Reflective Statements constitute compliance with the American Board of Pediatrics requirement for MOC Part 2 credit. Deadline for completion is 7/31/2023.

[Click here](#) to provide your responses in the Reflective Statements form