SOCIETY FOR PAs IN PEDIATRICS

SPAP Shout Out

A monthly update for SPAP members with a purpose to educate and encourage the engagement of PAs who work with pediatric patients

An Update on Influenza Season

Brian is a past-president of SPAP and is currently serving as the AAPA's liaison to the American Academy of Pediatrics. Brian has practiced in pediatrics since graduating from the Duke PA Program in 1999. He worked in primary care for 6 years, and has been at Children's Healthcare of Atlanta practicing in pulmonary diseases for the last 13 years, where he also is PRN staff in the urgent care network. Brian is a PALS instructor, volunteers at asthma camp, and coordinates student rotations within his practice. He is a scifi geek whose 3 cats are named after Star Trek characters. He also enjoys birdwatching, gardening and traveling.



Influenza season is on the horizon, and most healthcare facilities, including pharmacies, are already dosing the flu vaccine. The 2018-19 season was labelled as moderate by the Centers for Disease Control. It was not as severe as previous years, but was the longest season in a decade. It presented as a typical season with sporadic cases in late September and October, peaking in December – with cases doubling each week in December - and remaining high through February, with cases being reported into late May. Influenza A viruses predominated through the season, with H1N1 being isolated most commonly October to February, then being replaced by H3N2 for the latter part of the season.

There was high utilization of health care services this past season. There were 130 pediatric deaths nationwide due to influenza, with the highest rate being in February. Death occurred more commonly in girls (56.3%) than boys. The most affected age group was 5 – 11 yrs accounting for 34.6% of the deaths. There was a slightly higher rate of death in children with a high risk condition, 52.5%.

Flu vaccine effectiveness for the 2018-19 season was estimated to be 61% in children 6 months to 17 years. Vaccine coverage, however, was fairly low, particularly in older kids. Those aged 13-17 years had a vaccine coverage rate of 35%, while those 6 months – 4 years were at 57%. Influenza vaccine remains the best way to prevent infection and complications from infection. The 2019-20 vaccine is

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already widely available and no shortages are anticipated. It is recommended that everyone 6 months and older receive influenza vaccination. The vaccine is different this year with changes made in the make up of the H3N2 and H1N1 virus component; B viruses remain the same. It is still recommended that children between 6 months and 8 years of age who have only had 1 previous flu vaccine, get 2 doses this year separated by 4 weeks.

For children, there are several different vaccine formulations available : a trivalent inactive injection (Afluria) for ages 5 yrs and greater; four quadrivalent inactive injection (Fluarix, FluLaval, Fluzone, Afluria) for ages 6 months and greater; one quadrivalent cell based injection (Flucelvax) for ages 4 yrs and greater; and the quadrivalent live attenuated nasal spray (Flumist) for ages 2 and greater. The CDC is not making any specific recommendations on which vaccine is best to give this year. Note that Flumist is back on the pro-recommendation list. It had been removed to due weak activity against H1N1, but its reformulation earned its spot back on the list last year.

Flu vaccine is no longer contraindicated in persons with egg allergy, even if it is a severe allergy. Flu vaccine is safe to give with other vaccines and can be given even when ill. Flumist should not be used in children ages 2 - 4 years with a diagnosis of asthma, or who have wheezed in the prior 12 months.

Testing for influenza is left to the discretion of the provider. It should be done for persons being hospitalized, during outbreaks to track disease, in young or high risk population individuals, or when the diagnosis is not clear. Reverse transciptase polymerase chain reaction testing is preferred because of its high sensitivity and specificity (90-95%). Rapid tests are available with results given within 20 minutes. Numerous rapid antigen detection tests are commercially available with wide ranges in sensitivity (50-70%), but all with 90% specificity.

There are 4 antiviral medications available to treat children with influenza. The amantadines are no longer recommended. It is generally recommended that those with high risk conditions, those with severe disease, and hospitalized patients be treated with these medications. The medications work best if started within 48 hrs of symptom onset, but should be considered even 4-5 days after symptom onset for hospitalized patients. The medications are as follows :

Generic Name	Brand Name	Route	Age	Dosing
Oseltamivir	Tamiflu	PO	14 days and greater	If younger than 1 yr old: 3 mg/kg/dose twice daily. If 1 yr or older: 15 kg or less, 30 mg twice a day; > 15 to 23 kg, 45 mg twice a day; > 23 to 40 kg, 60 mg twice a day; > 40 kg, the dose is 75 mg twice a day. 5 days of therapy.
Zanamivir	Relenza	Inhaled	>5 yrs	10 mg BID x 5 days
Peramivir	Rapivab	IV	>2 <u>yrs</u>	2-12 yrs : 12 mg/kg dose, up to 600 mg; 13 yrs and above : 600 mg Single dose infusion over 15 minutes
Baloxavir	Xofluza	РО	>12 <u>yrs</u>	40 to <80 kg: One 40 mg dose; >80 kg: One 80 mg dose

If this year's flu season is like past ones, there is still plenty of time to get the flu vaccine. I'm encouraging my patients to get it before Halloween. Remember that it takes about 2 weeks for the vaccine to be effective, so early administration is recommended especially for those who require a booster administration. Vaccination should still be offered to those who have had the flu during a season as multiple strains may still circulate as we have seen in the last two seasons. Flu vaccine hesitancy is prevalent, higher than for other vaccines. The American Academy of Pediatrics has some great resources for coping this but this does require an individualized approach. Stay healthy this winter, and get your flu shot!

Resources:

https://www.cdc.gov/flu/

https://time.com/5610878/2018-2019-flu-season/

https://online.lexi.com/lco/action/search?q=tamiflu&t=name&va=tamiflu

https://hosppeds.aappublications.org/content/8/10/628

https://www.aappublications.org/news/2019/04/16/vaccine-hesitancy-partnering-to-change-minds-pediatrics-4-16-19

NEW PODCAST SERIES

Gaining Ground: The Primary Care Pediatrician's Role in Public Health Systems of Care for Children and Youth with Special Health Care Needs

Receiving care within a well-functioning system is essential for all children and youth, especially those with special health care needs. Developed by the National Resource Center for Patient/Family-Centered Medical Home, in partnership with the Association of Maternal and Child Health Programs, Family Voices, Bright Futures National Center, Healthy Tomorrows Partnership for Children Program, American Academy of Pediatrics (AAP) Council on Children with Disabilities, AAP Council on Community Pediatrics, faculty in this 3-part podcast series discusses real-life examples, strategies, and opportunities to develop partnership between Title V MCH / CYSHCN programs, primary care pediatricians, and families. The podcast provides an overview of the history and current functions of state Title V MCH / CYSHCN programs as well as benefits National Resource Center of multi-disciplinary partnerships. Tools and FOR PATIENT/FAMILY-CENTERED MEDICAL HO resources discussed during the series have been Formerly the National Center for compiled and are free and accessible to the public. Medical Home Implementation

SPAP Member Spotlight Ana Gomez, PA-C, MPH

Ana Gomez graduated from PA school from The University of Texas Medical Branch in 2018. Prior to PA school, she obtained an MPH in epidemiology and worked as a clinical research coordinator for two years. It was during those years as a research coordinator Ana fell in love with pediatrics. Since graduating from PA school, she has worked in a general pediatrics outpatient clinic. She will be switching into an inpatient pediatric medicine role in the near future.

How did your career as a PA start?

As I was finishing my MPH, I craved patient interaction. One of my very good friends introduced me to the PA profession. After reading about it, I had no questions in my mind that this is what I wanted to dosince it provided me with the opportunity to care for patients while maintaining a heathy work-life balance.

What does your average day at work look like?

My current job consists of providing primary care to pediatric patients, most of which are either medicaid or uninsured. I see an average of 32 patients a day and speak Spanish at least 60% of the time. In my current job, I am very independent but I am able to consult with the other PAs, NPs and physicians at my practice.

How did you first hear about SPAP?

When I first started my job as a general pediatric PA, I was looking for resources that would allow me to provide the best possible care to my patients, and as I became a member of AAP, I was invited to become a member of SPAP.

Why pediatrics?

Children are resilient. It is so gratifying to see how children come out of situations that seem impossible to overcome. It inspired me to know that the impact that my job has will last a lifetime. I also enjoy educating and equipping parents with the skills to become the best possible advocates for their children's health.



What is your favorite part of being a PA?

Knowing that I am an essential part of providing care to those that otherwise will not have any. The genuine gratitude of parents when I can provide relief to their children's suffering. When I can witness the impact we as PAs and medical providers have in the life of patients.

Any advice for new PAs or PA students?

Understand that we will never stop learning. Medicine is always changing and the danger lies in become comfortable and thinking there is no need in continuing learning, studying and reading. Fall in love with learning!