



Podcast Contributor Show Notes

TITLE: Kids, Schools, and COVID

Name: Dr. Ryan Padrez - rpadrez@stanford.edu

Academic/Community Title: Assistant Clinical Professor in Pediatrics at Stanford School of Medicine, and also Medical Director for The Primary School Services on the Executive Committee for Council of School Health at American Academy of Pediatrics

Summary:

In this Hippo Education bonus, Dr. Lisa Patel from our PedsRAP team sits down with Dr. Ryan Padrez, Assistant Clinical Professor in Pediatrics at Stanford University and Executive Committee member on the Council of School Health at the American Academy of Pediatrics (AAP). They discuss the most recent AAP guidance published on COVID-19 planning considerations for school re-entry and suggested protocols on suspected COVID-19 and contacts.

References:

<https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-planning-considerations-return-to-in-person-education-in-schools/>

Tags:

Pediatrics, Infectious disease ID

1. Let's start by talking about how we got here. There was some hope that schools would re-open. The American Academy of Pediatrics put out guidance early in the summer about how schools could safely re-open. What's driven so many school districts deciding to do remote?
2. Let's talk about what it means to safely re-open. What do we need to see in the community and what do we need to see at the school itself in terms of adaptations?
3. What's your sense on whether school districts will convert to in-person in the coming year? We've heard the message, "we STARTING remote" Do you see a reasonable path for districts to re-open midway through the year?
4. Let's take the hypothetical that a school does open to in-person instruction. I understand you've been working on developing a flow chart based off guidance from the CDC for schools to decide what to do with a symptomatic child in terms of test/quarantine, and what to do with a child who tests positive for covid-19. Can you talk us through those recommendations?
5. What do we need to have in place to make good on those recommendations? It seems like a lot of this will depend on us having faster turnaround time for testing and better contact tracing?
6. We practice in California where there are enormous inequities in the education children receive. There is concern that remote learning will exacerbate these inequities. What advice do you have for pediatricians as we try to navigate this complex scenario in helping our patients and communities, answering the educational needs of our own children, and not worsening the inequities (for example, lots of families are "podding" this year).

[] **Medications:** Please denote when medications are mentioned

- Drug names (please avoid trade names)
- Dosages (peds please use mg/kg)

[] **Images:**

- Open access pictures/images (eg, ECGs, Xrays, Charts/Tables, Images) - often can be found on Wiki, open-access PubMed
- Please include original source hyperlink

Please also include one CME question/talk and all of your references.

CME question: a simple multiple choice or T/F question based on your talk

I.e.: Which of the following is a potentially emergent diagnosis for the red eye:

- A. Acute angle closure glaucoma
- B. Orbital Cellulitis
- C. Scleritis

- D. Uveitis
- E. All of the above

ANSWER:E

References:

Please include your article references here. A hyperlink to the Pubmed abstract is sufficient. If referencing UpToDate or textbook, please use AMA citation formatting.

Caironi P, Tognoni G, et al. ALBIOS Study Investigators. Albumin replacement in patients with severe sepsis or septic shock. N Engl J Med 2014; 370:1412-21.

Assistant Clinical Professor in Pediatrics at Stanford School of Medicine, and also Medical Director for The Primary School Services on the Executive Committee for Council of School Health at American Academy of Pediatrics

1. Let's start by talking about how we got here. There was some hope that schools would re-open. The American Academy of Pediatrics put out guidance early in the summer about how schools could safely re-open. What's driven so many school districts deciding to do remote?

- There was a sense of optimism as we headed into start of summer that the curve was flattening in many communities and by late summer we knew COVID-19 would not be eliminated, but perhaps in place to re-open schools with the right precautions
- Unfortunately a second surge happened in late summer right at the time when schools had to be making hard decisions... second surge can be attributed a many factors,
 - one being many communities started loosening restrictions and opening up, and health officials predictably correctly with the summer holiday travel and gatherings with individuals not wearing masks or social distancing would cause a rise in numbers again (exactly what you saw in states like AZ, FL, TX, and GA)
 - Also what is not discussed as much is that it was also structural failures of our economy in supporting and protecting our front line workers (service industry workers in our restaurants, grocery stores, garbage), often under insured, often with no sick leave pay and living paycheck to paycheck, living in tighter corridors for housing, perhaps with fears of testing or government programs, that economically needed to go to work instead of practicing quarantine because they were a contact to a case, that were contributing to the rise
 - Finally being still struggles with easy and accessible testing
- All of this got us into a situation where school leaders across the country and in particular here in CA, to make the very difficult decision of attempting to open an in person learning environment at the same time cases were rising.

2. *Let's talk about what it means to safely re-open. What do we need to see in the community and what do we need to see at the school itself in terms of adaptations?*

- With updated guidance coming from CDC, American Academy of Pediatrics, and State Dept of Health and Education.... We are starting to get a clearer picture of what it will take to at the school level to open safely, all of it requires money and investment from schools:
 - Mask wearing for all students and staff
 - Set up space to encourage physical distancing of students and minimize gathering sizes on campus; Cohoring classes to smaller groups, and using bubble cohorts when possible
 - Increased frequency and access to hand washing; overall increased hygiene awareness
 - Moving things outdoors or focusing on good ventilation of classrooms (prevent indoor air)
 - Symptoms checks daily of students (perhaps best done at home by parents) and staff
 - Developing good protocols for working with County Health and district offices to support testing and contract tracing when there is a positive case in the school and good sanitation and cleaning protocols
- Where we have less guidance or clarity right now is at what level of community spread is it safe to re-open schools. A one size fits all approach is not going to work in the current environment. There are still some communities in the country that are experience uncontrolled spread of COVID-19, with large case-loads, testing postitivity rates, and strain on hospital beds. For communities with large number of cases, not likely safe to do in peron learning because of course the risk will be high that the school environment will contribute to spread. There is a some good evidence that young children <10 do not get as sick and do not play a role in spread similar to over viruses (so far), and that is good news for schools. But if there is rampant spread, of course children can play a role in spread. Right now the guidance is that “once local numbers improve” but given variation in how data is collected and reported across the country, there is no clear guidance out there.
- For my own school, I am looking at case rate over a 7 day average to be below 100 per 100,000 and testing positivity rates to be below 5%. But this gets complicated because you also have to decide where do you draw your boundary, at the state level, county level, city level and how accurate is the data you are working with?

3. *What's your sense on whether school districts will convert to in-person in the coming year? We've heard the message, “we STARTING remote” Do you see a reasonable path for districts to re-open midway through the year?*

- This is the crystal ball question I get from my school leader colleagues every week. I wish I had a good answer and this will vary for different pockets around the country (how rampant is the spread) and then how prepared the school is to implement safety measures.
- I think for many there could be a pocket of in person learning that could happen later this fall
- However, more realistically, my best guess (and this is just a guess!) is that many schools won't be able to reopen until March/April after the surge of flu and other winter colds
- Also not discussed enough here is the important role testing could play to help school reopen sooner. Right now testing is still very hard to access and results are often too slow with many taking 7-10 days to get a result back. Many guidelines are asking schools to have their testing strategy in place to regularly test students and staff at some specified interval. This is just not possible for most schools right now. Schools will feel more confident to reopen when they know that they can get a student or staff member in question tested quickly with results back to make a decision for how it may impact other students and staff at school. I am intrigued and think there is a role for strategies like daily antigen testing or weekly pool testing at a school level to more safely re-open, but I am quite skeptical we will ever get the amount of testing and pace of results we need with current PCR tests.
- I have been particularly intrigued by some of the ideas and plans for mass testing that have come from Michael Mina (epidemiologist at Harvard) who has been recently quoted in NYT and Atlantic about some mass testing strategies. I think those ideas have a lot of relevance for schools too

4. Let's take the hypothetical that a school does open to in-person instruction. I understand you've been working on developing a flow chart based off guidance from the CDC for schools to decide what to do with a symptomatic child in terms of test/quarantine, and what to do with a child who tests positive for covid-19. Can you talk us through those recommendations?

- Yes, as we moved into summer and the talk of reopening schools became a real possibility, in addition to safety measures around new practices to put in place at the school, I quickly started thinking about the need for clear protocols for how to handle students and staff with symptoms of COVID-19 and clear protocols for how to handle isolation and quarantine timelines for students and staff that were contacts. Because symptoms of COVID are so similar to many other common colds and viruses in kids (fever, cough, aches, diarrhea/nausea, etc). To stay safe, schools are going to need to handle sickness symptoms much differently when re-opening. There have been medical directors from around the country coming up with various drafts of protocols and flowsheets for how to handle symptoms and contacts. What the experience of trying to create these illustrates is that all pediatricians and providers will need to work closely with their school districts and local schools to be knowledgeable about their protocols. I

hope that as time goes on, we can start to converge on consensus. For now, I think it is best to split into 2:

- First new protocol for how to handle students and staff with symptoms of COVID; needs to be clear for possible non medical personal in the front office of a school
- List of most common symptoms of COVID and first step would be to isolate from rest of students/staff, ensure appropriate PPE, and arrange transportation home
- Then there is the dichotomy of can the student access a COVID test or not; if not then we need to assume the symptoms are COVID and that student will stay home for the CDC recommended 10 days since the symptoms first appeared, presenting symptoms have improved, and no fevers for at least 24 hours with fever reducing medications
- The real controversy here, and one that not all providers are in alignment, is what to do if you can explain the acute symptoms with an alternative diagnosis (strep throat cx, AOM, or appears very consistent with the course of viral acute gastroenteritis). In the past a doctors note would enable this student back to campus after appropriate treatment or isolation, but today in era of COVID being to mimic so many of these other viral colds, many schools will not allow the student back earlier than the 10 day isolation without a negative COVID test. So that means there will be a lot more students missing 10+ days of school unless tested, with the value placed on keeping the school community safe. There have been case reports of Strep + and COVID + or AOM and COVID +...still a lot to learn and the hope here is to take the pressure off the provider to make the call as it wouldn't be a good situation to approve a child going to back to school with what you thought was AOM when the fever was actually co-infected COVID.
- If the child can get a COVID test then the pathway is a little more clear if positive with CDC and local guidelines for isolation. The key for schools here will be to remove siblings as well as they are now all household contacts
- If the child has a negative COVID test then many flow charts enable students to return 24 to 72 hours after symptoms resolved. We are of course risking false negatives here but seems reasonable.
- Finally, what I know is on the minds of so many pediatricians out there is what about the patient with chronic cough due to asthma, or seasonal allergies, or migraines...
 - For these students with a known pre-existing conditions, we are also creating a pathway for students to get a letter from their provider to document this known pre-existing condition to enable them to stay at school if the nature of the symptoms (that could look like COVID for others) is consistent to what school personnel are familiar
- There is also another flowchart/guidelines in the works for how to handle students and staff that our contacts with a positive case. These are based directly on CDC guidance, but again trying to make it really clear and easy to operationalize for school administrators

- First is how to handle “non-household” contacts. This will likely be most common for positive student in a cohort classroom where the positive case likely had interactions with their fellow student < 6f for more than 15 min
 - Regardless of testing non household contacts are quarantined for 14 days
- Second is how to handle “household” contacts. This pathway is a bit more depressing given how much school students may have to miss, which is 24+ days. For example, if a student’s mom is positive for COVID she is now a “household contact” and the student has to stay home for the duration of his mom’s isolation period (~10 days), then the clock starts for the student’s quarantine and he has to stay home for an additional 14 days. For now, no testing will get that student back to school sooner.

5. *What do we need to have in place to make good on those recommendations? It seems like a lot of this will depend on us having faster turnaround time for testing and better contact tracing?*

- Yes, this is absolutely true and what makes me most nervous about all plans of reopening being discussed. We need to improve our accessibility to testing, the turn around time for tests, and then enhance our public health departments ability to contract trace. I feel for these labs working around the clock with supply challenges to meet the demand for testing, so it is clear we need more investment here for school safety.

6. *We practice in California where there are enormous inequities in the education children receive. There is concern that remote learning will exacerbate these inequities. What advice do you have for pediatricians as we try to navigate this complex scenario in helping our patients and communities, answering the educational needs of our own children, and not worsening the inequities (for example, lots of families are “podding” this year).*

- This is what keeps me up at night. One of the silver linings is that COVID-19 has highlighted that our education system provides so much more than just helping kids learn how to read, write and do math. It is critical for their social emotional development, the place where so many get regular meals each day, the infrastructure for delivering mental health services. My only hope is that we may emerge from this with more investment in our school systems given the important role they play in meeting whole child needs.
- Another frame of mind that I think is important, is that no matter how great the remote learning plans and systems (and I hope we get better for the sake of our kids this fall), they will not replace the educational and developmental and health value in-person schools play. The inequities between what some families will have access to do (podding, hiring private teachers to help with online learning, or even just having a caregiver be home to engage with the student during online sessions will create worsening inequities between the haves and have nots). This is why I am still a strong

advocate we need to invest the resources of our community to help schools open safely as soon as possible.

- But that doesn't help us in the current reality that so many of patients face right now, this week as we begin remote learning in our homes. I think as pediatricians we need to do what we do best, take an equity driven approach, helping each of our patients get what the need when then need it. Some things to screen for are:
 - Access to reliable internet and enough devices for each of their children in the home
 - Plans for patients who may be experiencing housing insecurity or food insecurity and connecting with resources in the community
 - Parents or students who are English language learners and challenges it may create in accessing home materials
 - Patients with IEPs and qualifying for special education services and how accommodations and services will be provided at home (still renewing evaluations at the beginning of the year even if remote)
 - Patients with mental health or behavioral health needs and how COVID may be exacerbating conditions and how they can continue to get therapeutic services at home
 - I have seen such an uptick in anxiety and depression symptoms across age span in my patients, especially for those with pre-existing conditions before COVID
 - Screen for patients that may be experiencing trauma
- For these and many more inequities, there are not easy solutions. For students with special education needs, mental health needs, schools there are creative ways with telehealth to continue services. I know some mental health therapists have actually found it easier to regularly connect with students with telehealth during this time as they have been a field using telehealth robustly for years and have developed some good best practices that have paid off during this time. So just because schools aren't physically open, doesn't mean services are available and it just may require a click of patient advocacy and partnership with the schools.