

Isabel Valdez ([00:01](#)):

Hello and welcome to Optimizing Immunization Practices, your Role, your Impact, a podcast series brought to you by the American Academy of Physician Associates and the France Foundation. This activity is supported by independent educational grants from Pfizer and GSK. This is one of six episodes focused on how you can optimize adult immunization in your practice. In this episode, we will focus on the rationale for continued vigilance in adult immunizations. We're going to discuss the current rates of immunization amongst the adult population and we'll feature information on the overall immunization schedule, including existing resources which may highlight recommendations for the patients we see in clinic. My name is Isabel Valdez. I'm an assistant professor in the Department of Medicine at Baylor College of Medicine in Houston, and I am currently a PA in general internal medicine, and I am very delighted to be joined today by our esteemed expert colleague in family medicine, Sarah McQueen. Welcome, Sarah, tell us a little bit about yourself.

Sarah McQueen ([00:59](#)):

Thanks so much, Isabel. I am a family practice PA. I've been at FQHC for my entire career, which so far is about 16 years, and I am the liaison to the adult combined vaccine schedule work group, which is very interesting and I am very happy to be with you today as we talk through this very important topic.

Isabel Valdez ([01:22](#)):

I think that no better time than the present. We were talking offline just a second ago about how we're seeing a measles outbreak currently in the state of Texas, which is where I practice. So no time like the present to be advocates for immunization for our adult population and to help them out. Actually, I'm going to use that as a leeway as to why it is important for us to continue with this vigilance on adult population. Why is it necessary? How do we approach, how do you approach it when patients tell you whether or not they need to keep doing vaccines? What's your usual spiel on that?

Sarah McQueen ([01:56](#)):

It's interesting. I think we need a spiel page. We all have our go-to discussion, so typically what I'll start with is, so first and foremost from the terrible example of the current measles outbreak is if they're not vaccinated, that's the goal. We want to get them vaccinated because obviously without immunity, these conditions are going to be more dangerous. The other issue with that is as we age, even starting in thirties and forties and then continuing on, there's this condition of immunosenescence, and so our immune systems, they just become a little more forgetful. Even though we've had vaccines before, this is the time where sometimes we need additional doses. So those things make a big impact on our adults. We also, as we age, we start to get medical problems. We end up with diabetes and heart disease, and current statistics now show that about 14% of adult population, which is over the age of 18 has diabetes. And so this is a big deal in terms of our bodies need help in protecting ourselves from these infections.

Isabel Valdez ([03:04](#)):

It's the population with whom I see this a lot, right? The idea of immunization wanes. You get the pre-PA student, the pre-nursing student that says that they need their titers so that they can get their vaccines, and they're always surprised. I think Hepatitis B is one of the ones that kind of wanes in like, yep, we have to start the series again as healthcare providers. So it's a quick and easy example that we see in clinic day in, day out. And I don't know in your population, I know that in mind. I have a huge population of patients who are immunosuppressed. They're under treatment for cancer, they're receiving

medications for rheumatologic and autoimmune conditions, and we have to make sure that their vaccines are up to date right before they start a big treatment. And solid organ transplants patients specifically, I don't know if you have that, have you've seen that as well in your population?

Sarah McQueen ([03:49](#)):

Absolutely. It's getting bigger as these immunosuppressing drugs get further indication. So even it's surprising, but your folks with eczema, which I'm in northeast Tennessee, Southeast Kentucky, I think even if you weren't born with eczema, once you move here, you end up with it. There's something about the climate. And so I think there are lots of folks on these medicines that they may even not remember telling you about because so many of our patients, especially in primary care, they think that the medicines they're on just pertain to the specialty that prescribes them. And so it is something that's very important to make sure you're getting that medication list because even though they don't look like a typical person or they don't have the typical risk factors for immunocompromised and condition, they may be on a medication that you're unaware of. And they may be unaware that it does that too. Because even though we discussed with our patients what these medicines do, sometimes they forget or they're really not taking in that that's what those medicines do.

Isabel Valdez ([04:46](#)):

In fact, it's this very population right now we're at the time of this recording, we're at the tail end of winter. We're going to start fall of 2025. A lot of the patients are coming in with who just got flu. In fact, we had a flu outbreak not too long ago earlier in the year. And these are the patients that had they not gotten their flu shot, they could have developed complications like pneumonia. So in fact, some of these patients now qualify for pneumonia vaccines even though they're not over the age of 65 with something that we have to consider in our immunocompromised patients. And it's impressive what some of the rates are for current vaccinations right now in our adults. Is that something that you can speak on?

Sarah McQueen ([05:25](#)):

Impressive. I am not sure. I think it is impressive, but maybe not in the positive way. So certainly if you look at our pneumonia vaccine recommendations, which most of the time when you talk to our aging population, they are concerned about pneumonia. We're sitting at in 2022. Some of the rates are around 23% of folks getting vaccinated for the pneumonia vaccine. And we will talk about that more extensively. And there's even some resources that come along with these episodes for that. Our COVID vaccine, we're actually seeing 73% vaccination rate in our adults shingles. We're at about 34%. And that's shocking to me because I think shingles gets, it's scary. I think if you see your friends and family that get shingles, you think, oh, I do not want that. And then on our end, the clinical side, we see the folks that end up with this longstanding chronic neuralgia from shingles are tetanus. We're at about 59%. I think that's not surprising because a lot of folks that's in their brain every 10 years, tetanus or cut or dirt, those types of things. Now, in February, 2025, the RSV vaccine is really getting pushed as it should. About 46% of adults 75 and older have already received that vaccine, about 36% of the adults in the 60 to 74 age range. And so some of these numbers are pretty decent. Some of these, I think you'll see we still need a whole lot of work.

Isabel Valdez ([06:58](#)):

Especially with the RSV, it's kind of the new one. I'm still getting patients who have the question, do I even need it? And now I don't have as big of a population of patients who are pregnant, but that's another population that we're starting to see. Every now and then I get that one or two patients I need

to remind as a patient who is pregnant or as they're planning on getting pregnant, I start to have the conversation of the tdap. You may want to get it, definitely get it when you're pregnant. In fact, we have a whole talk on that and when's the right timing. But even RSV, there's a new vaccine that can help them, a version of the RSV that can help our patients who are applying to be pregnant. So this is cutting edge right off the press recommendations that we're sharing with our listeners. And I know that we have a big lift right now because the CDC healthy people, 2020 and 2030 goals are using us as their ambassadors for vaccination in the adult population. So what is the recommendation with respect to these goals? What should we be aiming for herd immunity for our population to really have that protection that we need.

Sarah McQueen ([08:05](#)):

And so herd immunity is something I think we heard a lot, and for some of us we still kind of shudder when we hear that, but it is important. That is what gives us protection. And when we say protection from illness, so we're not expecting no illness whatsoever. We're expecting really just protection from severe illness, from hospitalization, from multiple days off work. All of the things that come when you or a loved one are really sick, childcare issues, all of those things. And so for herd immunity, typically the target is between 70 and 90%. And that does kind of hinge on the actual population that we're speaking of. So even if we talk about 79% of the entire us, if you have a pocket within in the US that is less than that, you're not meeting those goals. And so I don't know, 70 to 90 seems overwhelming to me. What do you think?

Isabel Valdez ([09:01](#)):

Well, I feel that we should be able to do this. We should, and we need this heavy lift, in fact, the minimum of 70% to protect our population. So important at this time right now in the state of Texas, we're having this outbreak with measles. And to hear that, given this number, this extrapolating here, but not even 70% of our population was vaccinated against measles or received the MMR vaccine. And now we have some kiddos are getting the infection. I have believe there's discussion now how the MMR of haw outbreak in the state of Texas, which was just in the panhandle, is now in different, it's spread to different parts of the state. And Texas is a big state, and I can just imagine how it's going to happen. All we needed was 70% of immunity to help protect us against that. And the mortality rate, of course, with measles being what it is, it's kind of scary that what we could be coming up against had we just hit that 70% so we can do it here we are the stewards to try to help and promote it.

([09:57](#)):

So it feels like if all we had just met that 70% mark of herd immunity for MMR and measles in our state, we would be seeing, we wouldn't be in this scary time right now with a lot of moms and dads who are worried about their kids getting measles. And I realize that that's MMR something we think about with kids. But every now and then, it's something that we need to consider in our adult population. The CDC has given us a fantastic table that outlines what's recommended from what age to what age for our adult population. And we've already started to chat about which ones we need to think about. And we probably already have them in stock in our clinics. COVID-19 being one of them, influenza vaccine. TDAP is very, we definitely have that in our office. One of the ones we don't have, two that we don't have is the RSV vaccine and the shingles vaccine.

([10:48](#)):

But those are pretty important to at least have the recommendation ready for that patient that's going to ask you, do I need this knowing? Just being familiar with our local resources so that we can tell our

patients, yeah, you should be able to get it at your pharmacy. Just an appointment with them might be able to get them that protection with those extra shots that we don't have in clinic HPV vaccine. That's another one that I actually, because my population is a little bit in the older age, probably outside of the recommended the age out of the HPV vaccine, but I'm sure that's something that might come up, especially in your practice, Sarah and family medicine. I suspect that you might see this more than I do.

Sarah McQueen ([11:26](#)):

It does. It does come up. And the most recent example was unfortunately a case of tonsil cancer in a grandmother, and then it was related to the histology came back that it was related to at HPV. And so this was the motivation then kind of for the whole family. So then it was daughter, granddaughters, cousins, nieces, nephews, everyone then realized, oh, wow, we didn't know. Had no idea. And it was just this ripple effect. And so I think it is important I came through and at first the original recommendations I was too old to get. I was like, oh man. And so now there are recommendations up to the age of 45, and that is something that's really important to consider as we're talking about our patients, especially if they're coming to you newly divorced or position changes in terms of relationship status and those types of things.

([12:23](#)):

And I think another really important thought that I was having too is there's also room for, so some of these children that we have who are not vaccinated, become adults that are not vaccinated. And so their parents at that time made these decisions to not vaccinate, but now there's these adults stepping in. And so when you look at the MMR vaccine, we're not just thinking or shouldn't be just thinking of immigrants coming without being vaccinated. They probably have better vaccination rates than we do if we really look into it by country and nation. But honestly, we have 18, 19 year olds in our practice probably that if we sat down and had a discussion with them that we could start these vaccines in them and it would be beneficial to them and our entire community to just watch out for that population. I also think it tends to be something that can be controversial with HPV, but I think it's very necessary in our adult population.

Isabel Valdez ([13:22](#)):

Oh, absolutely. We're aging ourselves because yes, when this first came out, I was outside of this. I was like, I missed it by, I'm not going to say how many years, then you'll figure it out, guys, you can do math. But yes, it's one of the ones that I missed it when it first came out, and it's one of the only vaccines that we have that's actually prevents a type of cancer. And I think one of the vaccines that we think about for our adult population that is super important, in fact, it's the one I think about the most in clinic is the pneumonia vaccine that we commonly call the pneumonia vaccine in clinic. We have PCV 20, I think we're got to get PCV 21. I have patients who tell me, but I got this two years ago, I got this three years ago.

([14:03](#)):

And I remind them that there's changes constantly on the serotypes with these vaccines. So there's also improvement from year to year. So I tell them the one constant is change when it comes to the pneumonia vaccine because they may age into a vaccine that didn't exist before. And as it is happening right now with patients who've gotten the PSV in the past, now they're getting PCV. And because it's changing so much, I often use the CDC website and they have a pneumonia vaccine calculator app situation that I personally use. My students love it because when I gave them the talk on how to figure out the pneumonia vaccine one year, it just looked like a big mess. But now that's an easier slide that I

get to teach my students because all it is a pneumonia vaccine. There's an app for you to figure out PCV vaccine your patient is eligible for based on their medical conditions, their age and whatnot. So the science is improving. The landscape is constantly changing with infectious diseases. So it's great that we have vaccines like the ammonia vaccine that's keeping up to date with those changes in the infections. That's always a tough one with my patients though.

Sarah McQueen ([15:12](#)):

It is. It's very tough. And I think a great example is, as you and I both celebrated the pap smear recommendations when it went from every year to now every three to five, I was like, woo-hoo. And unfortunately with vaccines, sometimes that's not the case. Sometimes you don't need anymore. A lot of times with pneumococcal vaccine, it used to be just cut off at 65. Now there's some other nuances with that. So sometimes you don't get anymore. Sometimes you get extra. And I think in terms of the shingles, the zoster recombinant vaccine, we give that to folks even if they had the original or the old version that's no longer out there because this one actually works better. But I think that's an easier pill to swallow, shot to take. Whatever kind of pun you want to put in there is because you can say no, but listen, this is going to give you a much, much greater chance to not ever get shingles if you take this particular recombinant vaccine. And so I think, yeah, we just got to roll. What is it? Roll in with the homies really dating myself with that movie.

Isabel Valdez ([16:20](#)):

No, I love it. We're dating ourselves with the movie and the fact that we know the original zoster vaccine, which is no longer even, and a lot of the new grads that are going to be listening to this are going to Google that and say There was what? So what there was, yeah, used have, we're on our second reiteration. And I try to recommend then the shingles vaccine to patients as soon as they become of age for it, because we don't know what their health status will be like as they age. We have patients who move into long-term care facilities. God forbid they get ill, they develop a condition that may make them eligible for a transplant in the future. So the sooner you get vaccinated now, the better for you, especially with shingles right there. So in fact, long-term care facility patients, I have my pre-list thinking always the respiratory things.

([17:12](#)):

I think about RSV, of course, a brand new one, annual flu shot and covid vaccine. But I was impressed as I was filling out paperwork for one of our patients who is transitioning to long-term care facility at tdap. They requested that she have her tdap and I had a moment of, but why? And then pertussis. Oh, that's right. That's right. What other populations do you run into that you think you can think about that need that vaccine, that special population? These are the ones that I sometimes forget, just like I did about with TDAP and my very sweet patients. So which ones do you run into as well in family medicine?

Sarah McQueen ([17:47](#)):

So honestly, we're seeing more, we have the stem cell transplant folks and even organ transplant folks, but the CAR T therapy is becoming more and more extensive even outside of the cancer realm. And so their recommendations now of really just after three months, those folks start completely over. And so it's really making sure that you understand, okay, when do we, there's some vaccination, there's some additional vaccination, and really just things that you pay attention to. We don't see, I don't see a whole lot of asplenia, I think I always forget about it's that one and the cochlear implants, like those little bullet points. I think that I don't see enough, and I always think, oh, I forget about that. And I think I always just

assume, well, their specialists will take care of that. But I think that's a point even for myself to going forward is, but I should make sure of that for sure.

[\(18:49\)](#):

We do see pregnant folks, and so making sure that the influenza, tdap, RSV and COVID vaccines are given and just kind of explaining what those are for. And so our specific population is honestly, we could check through the CDC and we will include that in the resources at the end of this, but we have all the things, right, even your secondary types of immunocompromised. But then we have liver disease, we have diabetes, we have COPD, we have asthma, we have all of those things that put you at risk, we're going to see. And so I think it is just important to make sure as providers, that we're making sure that we look at these disease components and how that affects your immune system. Because often when we're trained, we just learn about the disease and then how to treat it. And then your labs that you do every three to four months to maintain treatment.

[\(19:48\)](#):

And we don't really think about the effect of that on the immune system. And then how vaccines can contribute to the protection. I wish we had, which my coworkers in family medicine would probably not like this, but primary care, when we see our diabetic folks, we are going to document that they're on aspirin or if they're on renal protection, either with an ACE or an ARB or are they on a statin therapy in most cases. And so let's add another bullet point. Have we protected them against these other conditions? Most of the time, respiratory, that could actually exacerbate their other risk factors. So many of our respiratory illnesses can actually cause cardiovascular disease or cardiovascular events. And I think digging into that, adding that as another type of prevention that we focus on in these chronic diseases, I think would do us all pretty good.

Isabel Valdez [\(20:42\)](#):

Right? Because we forget that this is a population that can become immunocompromised. And it's true. We forget about the shots and the take home right here, the big driving point, chronic conditions will lead to immunocompromised states. And that's if my patients with diabetes end up in the hospital, they have uncontrolled diabetes, they end up in the hospital with the flu that leads to pneumonia, their pneumonia is going to be very difficult to treat as difficult to treat as someone who probably has no immunity from chemo. So I try to explain that to my patients. I say, yes, you have your immunity. We're trying to keep it up, but there's complications that can come that are inherent too, your chronic conditions that make you a special patient. We want to put it in a bubble, but we can't always do that. And I think we've been talking about resources throughout our conversation, and of course my favorite being the CDC and their pneumonia app. What other, do you run into other resources that you use in clinic that you like, that you like to pitch to your students? I know you teach, so your students to your colleagues. What do you have out there? What's one of your favorite ones to use?

Sarah McQueen [\(21:46\)](#):

So for me, immunized.org is probably my favorite. And it is a nonprofit company, and they kind of compile all the resources that come from the CDC and the FDA, because sometimes it's a matter of you think, oh, we're putting the same information on a bunch of different tables. Why do we do that? Sometimes we have different ways that we think and organize. And so I'm, from the opinion, the more different types of tables, the different types of color coordination, it's going to help somebody remember more or understand a little bit better. And so some things are a little easier to grasp. I think from that website, the thing I like probably the most is they offer an adult vaccine card, and so you can

order a little wallet card, and so then your adults have that. So now I think after the pandemic we just had, people might not be proud to carry their little card around anymore, but I think it's important as adults, our 18 to say 45 population, we don't see them very often, especially if they're healthy and they don't have any chronic conditions.

[\(22:56\)](#):

And then our older population, they have so many things that they're focused on. They're not remembering if they've had all their adult vaccinations. And so having a card I think helps with them. I think it's also a good reminder of we have our patients who always get the flu vaccine, but they don't get any other ones. And so if you have this card that kind of sits empty with the other vaccines, I don't know, maybe eventually they're going to see that blank space and say, maybe I should look into this more. Maybe I should talk about it again. But this website also has a PDF that you can just print off. If your practice doesn't want to order the cards, you can just print it off and your nurse can just hand write it. And in terms of that, your state registration websites, you should be having your nurse put all the vaccines that are given into those state sites because those are used by lots of places. All the chain pharmacies use those. And you can also print off a nice certificate from those places just so that our adults have record of that. And I love when they bring them into me because now I know which pneumococcal vaccine they have. Now I know what they're missing. And so I just love immunized.org has kind of, if you can say there something for everybody, it's great for patients, it's great for practitioners. It really is a good place to use. I use that quite a bit. What about you?

Isabel Valdez [\(24:19\)](#):

Well, I, I've been touting CDC often because I'm using for everything for travel medicine advice and what's changed and what's new and keeping up with pneumonia. But yes, I usually do CDC. I love it when patients tell me it's in the computer. Like, no, not everything is in the computer because things don't download. Or you may have gotten a vaccine at a different doctor's hospital that didn't put it in the registry. So I love your idea about having the card. It dates us because you and I probably had the card that we were using in school, but now we got very spoiled with the registry, state registry. But just getting into that practice, it's not a bad idea, especially for a population that's aging, the ones that really need these vaccines. Well, everybody needs vaccines, but I think about them because they're such high risk for infections.

[\(25:08\)](#):

The other thing I use, I know that in our EMR, in our institution, we subscribe to UpToDate, so I'll use that as well to kind of give me guidance. And they also have patient education information, and it's multilingual. So I have a very large Spanish speaking population where I live, and I'm able to share that with them. So kind of give them information in a language that they understand so that they're informed as well. So I'd love that. I love that access to that. So gosh, we could be talking about this forever. And actually we will be talking about some specifics coming up in some of our next episodes. But really if you wanted to give us a couple of takeaways, Sarah, what would they be? And I would take us home with this.

Sarah McQueen [\(25:50\)](#):

So I think mean the major takeaway is why we talk about preventative medicine to begin with. We're really just preventing infections, preventing severe infections among our vulnerable populations. And part of that is, yes, we as practitioners, we generally care about the folks that come in our office and the folks that are in our community, our families, all of those around us. But also I think we have great

respect for our coworkers in the hospital systems. And so if we're keeping our patients out of the hospital because we're reducing severe disease, we're also making the burden of care inside the hospital systems much less. We know that we get overwhelmed very easily due to all of the things that affect hospital care. And so we're protecting our coworkers also. And so making sure that we vaccinate is so important to our entire healthcare system, as cheesy as that may be.

[\(26:49\)](#):

And I think this landscape of disease and infectious disease and how it affects adults is ever changing. And especially those with chronic disease. Those little charts that you see on all these websites, they used to be very small. It would just be asthma or cardiovascular disease. And now we keep adding liver disease, diabetes, chronic kidney disease. And so I've kind of seen these lists get bigger as we understand disease, as we understand how that affects anyone. And so just trying to keep a hold of how these diseases affect our patients. And so making sure that our adults are vaccinated is one way that we can maybe not have to worry as much. We can just breathe a sigh of relief if we're trying to vaccinate all of our adults. And I think, I don't know about you in your practice, but I do think this is why I became a PA.

[\(27:46\)](#):

I do think that we're positioned well to really be just the voice of this and the instrument of this to our patients. I went into this to be the person that sits and talks to our patients. I have longer with them. That's kind of the PA talking. If you get interviewed in PA school, it was why do you want to be a PA and not a doctor? Like, well, PAs are known for taking more time with patients. And I think, and so for us to really focus on what called us or what led us into this profession, and that's educating our patients, it's preventing disease. We have the ability with these vaccines to prevent worsening chronic disease. I think there's a big focus now on chronic disease as there should be, and how do we prevent chronic disease? And yes, diet, exercise, cleaner water, cleaner air, all of those things. A big thing is a lot of our chronic disease comes from acute disease, and we have an opportunity to make a dent in that if we just try.

Isabel Valdez [\(28:52\)](#):

Yeah, and I think also another takeaway I have is using every opportunity that we have with patients. We're educating 'em every single time we see them about anything and everything that comes up. But when I think of vaccines, I usually think it's something that we do once a year during our annual visit, but thinking outside that box and offering their vaccines, not just during that annual visit, but also when they're here for chronic care follow up, like you have diabetes, there's been a change in a recommendation. You are now eligible. You have aged into this new vaccine, the pneumonia vaccine being the one that I think about all the time. So using every single opportunity, because you're absolutely right. One of the reasons that I became a PA two is because of the education component, being able to spend time with patients to chat with them.

[\(29:33\)](#):

Well, I think that was a great start for this series. Thank you so much to our expert in all things vaccine. Sarah McQueen, thank you for joining us, and I know that you're going to be helping us learn so much more coming up very, very soon. Thank you to everybody that's listening. Adult immunization has a tremendous benefit in reducing and preventing morbidity, hospitalization and mortality. But really right now, the vaccination rates are pretty low, as we talked about earlier. So we're calling on each other as peers, as colleagues, as listeners, as educators, and just to take action now and improve those adult immunization rates in our state, in our country, in our city, all over. So I want to thank you again for



listening to this episode of Optimizing Immunization Practices, your Role, your Impact. Please tune in to the other episodes that we're going to have in this series where we're going to discuss the vaccination information specifically for COVID-19 influenza, tetanus, diphtheria, pertussis, everybody's favorite, tdap, the respiratory syncytial virus, or RSV and Shingles vaccine. You can find the full list of podcast episodes in [aapa.org](http://aapa.org).