# Implementing the 2019 ASCCP Risk-Based Management Guidelines for Abnormal Cervical Cancer Screening Tests in Your Practice Webinar Transcripts
# July 23, 2020

## Nicole Nguyen:

Hi everyone and good afternoon. Thank you for joining us today for our webinar title, Implementing the 2019 ASCCP Risk-Based Management Guidelines for Abnormal Cervical Cancer Screening tests in your practice. We hope you're all doing well and staying safe. My name is Nicole Nguyen, Health Educator at the California Prevention Training Center. The CAPTC under contract with the California Department of Healthcare Services Office of Family Planning is sponsoring today's event.

## Nicole Nguyen:

So, before we get started, let's just go over some quick housekeeping slides so that you can join us. So first, make sure that you check your audio and select your desired settings to join through your computer audio, or to call in through your phone. If your internet is shaky, we recommend that you call in through your phone for the best possible sound.

## Nicole Nguyen:

And so please check to make sure that you're able to see the viewer screen with the slides on the left and the go-to webinar control panel on your right.

## Nicole Nguyen:

And then under the audio tab right here. When you click on this white arrow to expand is how you can choose at any time to change your audio preference. Again, if your internet is shaky, please call in through your phone. And then under here is the questions box, where you can submit all your comments and questions. Also, the thing is you can see this orange button with a white arrow. This is how you can collapse or expand your dashboard if it's taking up some real estate space. You can close it and then bring it back up. Or if you accidentally click it, this is how you can make it appear again. So, today's webinar will take about 90 minutes and will include time at the end for our presenters to answer your questions. So please send in your questions throughout the webinar and our speakers will address as many of them as possible at the very end. This webinar is recorded, so any responses to questions not answered today by our presenters will be sent out to participants later, along with the recording and the slide deck. There is an evaluation at the end, so please fill it out because your feedback is extremely important to us and it'll help us to guide us in developing our future content.

## Nicole Nguyen:

So now I would like to introduce our presenters. For our first presenter, we are really excited to have Dr. Michael Policar. Dr. Policar serves as clinical professor of Obstetrics, Gynecology, and Reproductive

Sciences at the University of California, San Francisco School of Medicine. From 2005 to 2014, he was the medical director of program support and evaluation for the Family PACT program, administered by the California Department of Healthcare Services Office of Family Planning. He currently serves as professor emeritus of Obstetrics, Gynecology, and Reproductive Sciences at UCSF. And then for our second speaker, we are really thrilled and excited to have Patty Cason join us today. Patty is a family nurse practitioner, trainer, and educator with a specialty in sexual and reproductive health. She has practiced for 38 years in a wide variety of clinical and academic settings and is a contracted consultant to training agencies, nonprofits, and state departments of health across the U.S. Patty serves on the ASCCP board of directors and is a member of the communications work group that developed the 2019 risk-based and management consensus guidelines. Patty also developed the path framework for person-centered reproductive goals and contraception counseling. She's also an editor of the 21st edition of contraceptive technology for which she wrote a seminal chapter on reproductive goals and contraception counseling. Other publications include research and opinion pieces and peer-reviewed journals, nationally utilized, online learning courses, instructional videos, textbook chapters, clinical protocols, job aids, and manuals. And with that, Patty and Mike the floor is yours.

## Dr. Michael Policar:

Okay, great.

## Nicole Nguyen:

Yes, so let skip.

## Dr. Michael Policar:

And thank you all for joining us. I'm just waiting a second for our slides to come up.

## Nicole Nguyen:

So, go ahead, Patty. You can share your screen now.

## Dr. Michael Policar:

Okay, here we go. Next. Okay, we don't have, well, our disclosures you've heard about. Patty is a member of the board of directors of ASCPP and I have no disclosures.

## Dr. Michael Policar:

These are our objectives for today. Next slide.

## Dr. Michael Policar:

But I do want to start with a little bit of a, an outline to tell you how we're going to do this. So, we've just finished the welcome and introductions. I want to say a word about sort of the evolution of these policies as they relate to the Family PACT program. And then I will give you a very quick roadmap through the quite comprehensive, 2019 ASCCP guidelines. Then I will hand the microphone over to Patty who will tell you about how to obtain an use that ASCCP app, about the guidelines themselves, and then

I'll close with a few words about implementation of the 2019 ASCCP guidelines in your practice. And then you'll have lots of time, hopefully for questions and answers afterwards.

## Dr. Michael Policar:

I've been associated with the Family PACT program all the way back then 1996. There are a few of you in the audience that might remember when this was called State Only Family Planning, even before we were the Family PACT program. But if we go back almost 25 years or so, cervical. I should say screening for cervical cancer has really gone through so many really significant changes during that time period. When Family PACT first started in 1996, remember that cervical cytology with screening, screening was done once a year. Women basically had annual pap smears. And of course, now the much more standard benchmark is every three years or every five years. Second is the fact that we did cervical cancer screening for sexually active women of all ages, including young teenagers who hadn't even started their sexual activity yet, or soon after a sexual debut. And of course, now we don't start until 21 years of age for the large majority of them. Most of you remember the days when cervical cancer screening was a matter of taking a sample from the cervix, smearing it on a glass slide, and that was read by a cytotechnologist. And nowadays we use much higher tech approaches to screening both with liquid-based cytology and with high-risk HPV testing. Well, lastly, you might remember that back in the late 90s, early 2000s, that all grades of cervical dysplasia or CIN, including CIN one was treated with cryotherapy, and of course now we don't do that any longer. So since then Family PACT, of course added liquid-based cytology, high-risk HPV-alone screening, and co-testing years ago. Nowadays the large majority of cervical cytology samples are read in a computer-assisted format and then re-reviewed by a cyto-technician sometimes cytopathologist.

## Dr. Michael Policar:

But I do want to mention that from the very beginning, Family PACT has followed ASCCP guidelines for the management of abnormal cervical cytology and abnormal histology obtained through colposcopy. And of course, with this version, we continue to do what we did with the 2000, with the earlier guidelines that were just mentioned. Now, one of the things I want to say upfront is the fact that we will not be talking about cervical cancer screening intervals, or the technologies used to screen for cervical cancer. This is going to be focused much more on managing abnormal. But I do want to remind you that we published a clinical practice alert in February of this year on cervical cancer screening that talks about the age ranges of when to start and when to stop screening intervals. Specific regular, I should say policies that have to do with screening people who are HIV positive or immune compromised. And in a fairly comprehensive listing of the Family PACT cervical cancer screening benefits.

## Dr. Michael Policar:

So, if you were to click on that link below, you would be able to find the, the clinical practice alert that has to do with screening policies of Family PACT. Now I just want to take you on a very quick roadmap, of the content of the guidelines. They are published in two separate articles that we've referenced for you, and it contains about seven or eight sections. And the reason that I want to do this is because of the fact that I was so impressed about how comprehensive these guidelines are. They're not only an update of the 2012 management guidelines, but in addition to that draw from other guidelines and

bringing them into this one. Probably the best example of that is how to manage the results of HPV-alone screening. So, it starts with an executive summary and introduction. Next.

## Dr. Michael Policar:

Then it goes through their recommendations for a variety of circumstances when people should go through surveillance or have colposcopy or when they should be treated. Next.

## Dr. Michael Policar:

The next section has to do with pathology reporting and laboratory tests. And here there's a section that has to do with the fact that, of course, we've used the terms low SIL and high SIL for well over a decade as they relate to cytology. Now they're very diff, very definite about the fact that they want that to pertain to histology. That is to say biopsies as well. The next part of that section has to do with some of the policies and guidelines regarding primary HPV screening, also referred to as HPV-alone screening. And it replaces the earlier guideline from 2015, that was referenced in the PPBI. Next.

## Patty Cason:

I did want to add that while the last terminology has suggested that we prefer LSIL and high SIL for histologic results. You're still going to be receiving results that are or CIN one, CIN two, CIN three, or CIN two slash three. So, these results will still be coming to you and in many cases, the pathologist will also say whether it's LSIL or HSIL.

## Dr. Michael Policar:

Great. Thanks Patty. Next slide. Oh, okay. Next is management of rare cytology results. So, the ones that we see really infrequently. AGC unsatisfactory cytology, absent transformation zone on psychology. Benign endometrial cells in both premenopausal patients and post-menopausal patients are all covered as well.

## Dr. Michael Policar:

Next is a section on the ASCCP colposcopy standards, which were finalized a couple of years ago by ASCCCP, and are really excellent guidelines that basically set a floor and a ceiling on how to provide high quality colposcopy services and really worth a read if you haven't seen that part already. Next.

## Patty Cason:

Yeah, I just want to underline that three times. There are so many changes that are represented in these standards. And if you haven't been to a meeting recently or been to a training recently, you'll be surprised by how many things have changed over the years based on the data.

## Dr. Michael Policar:

Yeah. Thanks. Next section is management based on biopsy results. And you can see the whole listing of the kinds of results that might come back after a colposcopy. And, letting you know, mostly through algorithms, but not entirely about how they should be managed.

## Dr. Michael Policar:

The next section has to do with surveillance after abnormalities, both short term and long-term surveillance. And this area has changed quite significantly as Patty will explain.

## Dr. Michael Policar:

And then the last dimension is advice about management and special populations. Those younger than 25, management during pregnancy, management of females with immunosuppression, which is important. ASCCP did a statement on that a few years ago. Now it's integrated into this guideline and then on management for females that are older than 65 with prior abnormalities, also a very significant change that Patty will explain.

## Patty Cason:

I want to add that in terms of special populations, maybe we don't think of it as a special population. But a lot of attention was paid in the consensus meetings to people that want to be doing everything they can to preserve their fertility. So, this comes to a question of what type of treatment or if there will be treatments. So that is a special exception in many cases.

## Dr. Michael Policar:

Yeah, great. That's always such a tough clinical dilemma. I'm glad they clarified that.

## Patty Cason:

They spend a lot of time with it.

## Dr. Michael Policar:

Okay. So, from here, I'm going to hand this over to Patty to tell us about how you'll be able to use these new guidelines and also a look under the hood about why they're written the way they are, Patty.

## Patty Cason:

Thank you. That was great to tee all of this up. So, there is an app it's brand new. It really has virtually nothing to do with the prior app. So, don't expect it to look like or act like the prior app, if you have that one. You'll also have to pay for it again, and I'm sorry, that's been the thing that people complain about most. It's got to put a lot of information into one app and make it easy for you. So, we tried to do it as best we could. So, let's get into it.

## Patty Cason:

If you'd like to follow along, it's always best. If you're wanting to use this, use this app in your practice, it would be best if you could download it now. And then as I'm talking through this, you can go follow along with me. So, if you go to your search field in either your Google Play or your app store it on an iPad device, and these are only available right now through mobile devices. So, they are not yet on the website. This exact same app essentially will be on the website and it will be free, but it's not available just yet. It should be pretty soon. So hopefully before the end of August, hopefully even the end of July,

if we're really lucky. So, you just go to the search field in whichever mobile device you're using and type in ASCCP guidelines, this will come up and you're just going to open that.

## Patty Cason:

And then when you start to use it, the first page you're going to see is for you to enter their demographics. So, it's the age, and then after that, you're going to look at what the clinical situation is. So first you put in the age, then you look at clinical situation and this is confusing for some people. But if you look at each of the things under the clinical situation. I'm not going to talk about the ones at the bottom because they're fairly obvious. But I'm going to show you what each of these line items means.

## Patty Cason:

So, management of routine screening results, as you can imagine, is telling the app what the results of your primary HPV screening or your co-testing, or much less recommended your cytology result goes in here. So first you say management of routine screening results, then you click next. It won't allow you to click next, unless you've filled in whatever information is required before you go to the next screen. So that's going to help you. It defaults to no prior screening if. So, if there are no prior tests, that's going to be put into the app when you're using it, then you don't have to check no, it defaults to no. But if the person has any prior results, this is quite important. It's important to put them in because it changes the recommendation. And that's one of the major changes with these guidelines is that the prior testing plays into figuring out what the percent risk is for things. So, if they don't have a prior test result, you just click next.

## Patty Cason:

And if they do have prior testing, you go ahead and put it in here. And then you will say at that point is the book default to no again, and then you'll just click next.

## Patty Cason:

I want to point out that when you get to the very end and it gives you the recommendations and the references and the percent risk, and sometimes it also gives you an algorithm. When you get to that page, you can always start over. But if prior to the last page, you'd like to go back to the beginning and start over. You only have to click on management, and it will ask you, do you really want to start over, and you say yes, and then it brings you to the beginning.

## Patty Cason:

So, after that, you're going to come to a confirmation page. There's nothing that you will be inputting into this page. This is really just to double check that you put everything in properly, and then you're going to have next. Sorry. My, my next is not working on my computer all of a sudden.

## Patty Cason:

So, then it'll give you this lovely recommendation page. Now this, I want to say that one of the things that's not great about this is that if you have a patient who has been managed incorrectly, according to the guidelines, sometimes they will punt and not give you an answer. So sometimes what they'll say is this was not handled properly, or this person was supposed to have had X or Y. So that's one thing

you're going to run into, in some cases. Hopefully the person has been managed properly up until now. Then it'll give you the recommendation. It'll also give you this percent risk down at the bottom, which is, I'm going to be explaining in a moment. Okay, so it's going to give you the recommendation, the percent risk, and then you're going to go ahead and start over if you want to. But if you, but if what you want to do at that point is to see why they're giving you these recommendations. It'll provide you a hyperlink to get you to one of the two articles, about the new guidelines that basically explain all of the data that went into the new guidelines. And so, it'll give you that as well if you want it.

## Patty Cason:

So, if the person is being followed after an abnormal test or an HPV result, but they haven't yet had a colposcopy, that's what this particular line item is for. So, you've got somebody they've had screening, they had abnormal testing. You've gone ahead and done whatever that follow-up recommendation was, and now you've got those results. So, I want to be really clear about this, this isn't right after the person has had the abnormal test, that information you will have gotten from the prior line item. This is for people who have already had an abnormal, and you followed them with the repeat in a year or repeat in three years or whatever it was that was the recommendation. And then at that point, you need to know what to do next. And so that's what this is for.

## Patty Cason:

And it will give you a percent recommend risk and recommendation as you'll see here. This is actually going to now be whether the person gets a, because of the results. I left the one on the left blank, because there are many different results that could bring you to colposcopy. But the point here is that once they give you a recommendation of colposcopy, and they give you this percent risk. This shows you where on the spectrum of risk, your patient lies in terms of, would it be beneficial to not only do a colposcopy, but to go ahead and do expedited treatment. Big change in this set of guidelines, then in the 2012 is the expedited treatment is actually recommended in some cases.

## Patty Cason:

So, once you know the pathology results, you've done a colposcopy, you've had several biopsies, hopefully not just one. Do we have a?

## Dr. Michael Policar:

Yeah, I have to make a quick clarification. So expedited treatment, is that the same as see and treat LEEP?

## Patty Cason:

That is the same as see and treat LEEP. Yes.

## Dr. Michael Policar:

Okay.

## Patty Cason:

Thank you, I should have clarified that. So, it's, so what you're going to be doing at this point is you're going to want to know what to do next. So, do I go ahead and continue to follow this patient, or do I treat this patient? And if so, do I use ex, must I use excision, or can I either use excision, or a treatment that doesn't actually give me a specimen to look at afterwards?

## Patty Cason:

And so, you will have put in one of these before it gives it to you. So, this is how it lays it out, and these are your options. And you'll see that they use the last technology of each SIL and then they give you the old terminology, CIN three, for example. And then they'll give you one of these three pages. And either they'll recommend that you follow conservatively, which is the algorithm on the left, or they're going to recommend treatment, or sometimes they'll give you an option depending on what the patient preferences. There is a lot of attention paid to share decision making in these consensus guidelines.

## Patty Cason:

So how, that's all on the app, this just popped forward all by itself. But how were these guidelines updated?

## Patty Cason:

So, this is really something we're proud of is that we had a very large number of organizations, both medical professional societies, but also patient advocacy groups. So, we had these patient advocacy groups, and they were quite involved with the guidelines. They really were instrumental in bringing to the conversation with issues that patients are concerned about as primary. So that's a really, that's a pretty big shift from the way things have been traditionally handled. We also had the CDC and the NCI. The NCI was actually very involved, with these guidelines. Both in terms of the data that they brought, but also the way that they helped to process the data that we've, the data we have from the databases. They were able to help us with those risk assessments.

## Patty Cason:

And you can see there that that's a very large group of organizations. So, let's talk, let's back up for just a second. And I want to say that there's a lot of confusion frequently about why we do screening. I think we want to be very clear. Why do we do this? Why do we want our entire population to be screened for cervical cancer? It's not screening for cervical cancer. So, I just want to say that first up. What it's for is actually to find precancer, so you can treat precancer. So, the person doesn't get cancer. So, we're not really, we don't want to know about an incident HPV infection. We don't want to know about things that are going to just cause anxiety, but never lead to any kind of disease process. So, what we really, the goal of all of this is to find precancer. So precancer is generally considered to be high SIL. So, it will be CIN two or three and not low grade and not CIN one. Those are considered to be pretty synonymous if. I'm not going to go a hundred percent with synonymous, because there's some amount of disagreement about this. But it's fairly true to say that there's when there is a CIN one or low SIL result. We generally consider that to be representing an incident, HPV infection, an HPV infection that was destined to go away by itself.

## Patty Cason:

So fundamental concepts, HPV is the cause of cervical cancer. So now that we know that it's very reasonable to focus on HPV as the thing that we need to prevent or treat in order not to have the person develop cancer. And it's not just cervical cancer, honestly, there's HPV obviously causes head neck cancers, and anal cancers and bulbar cancers and vaginal cancers. But we're for today talking about the cervix and HPV by itself as an incident infection, is almost always dealt with by the person's immune system. So, it is almost never actually going to become a problem for that person. When it doesn't go away by itself, and I say go away by itself meaning your immune system is handling it and getting rid of it, and you don't, you know, you can't do anything about it. Did I hear another? Okay. So not only do you need to have HPV to get cancer, you need to have HPV that has persisted. Because HPV that's presented to the body's immune system and the immune system handles it, actually won't ever have caused a problem. HPV that the person becomes infected with and doesn't get taken care of by the immune system will over time, and sometimes the short period of time be incorporated into the genome of the cells, and it will actually start to become carcinogenic at that point. And that takes a long time to progress to cancer, but it doesn't necessarily take a long time for it to go from an infection into something that is a precancer. So, in addition to time mattering. So, in other words, an infection that somebody got last month or six months ago, you really don't want to know about. An infection, somebody got five years ago, you very much want to know about. So, time matters, but type matters also. Type 16 is by far the most virulent, most dangerous and associated with most cancers. 18 is also one of the really more concerning ones because of its association with cancer and adenocarcinoma, not as much because it's the big player that HPV-16 is. And then if you know the person's current and past HPV status. Then you really actually know the majority of the information that you need in order to know what next steps are going to have to be. Because that person's risk is very, very much informed by what their HPV status is today and what it was the last time you checked it. And then if you want to just sort of think top level broadly and want to give yourself a cheat sheet, essentially. If the person has had two consecutive HPV tests that were positive, regardless of genotype, just two that are positive, even if they're not HPV-16. The person will go to colposcopy in every instance that we're going to see. So that's just a cheat sheet. If you know, your patients has just had two HPV tests in a row that were positive, you don't necessarily have to use the app. You can go ahead and do a colposcopy.

## Patty Cason:

So, we talk about persistence. We talk about incident infections. So many of us get HPV, the vast majority of us. If we're having sex of any kind with anybody, we're probably going to get HPV and our bodies are going to get rid of it. So that's that really wonderful swath down along the bottom, and you can see that by two, three years, the vast majority of people have cleared their HPV. Then we come to this yellow portion. Obviously in the beginning, we can't say that it's persisted because it's zero time point. But as time progresses and the person's HPV, doesn't clear, you'll see that right above that big yellow swath is a little pink swath, that's getting bigger and bigger. So that's when somebody's persistent HPV has caused whatever is going on cellularity on the cervix to be high grade, to be pre-cancer.

## Patty Cason:

And if you don't at that point, treat that high grade, that precancer, then over some period of time, it will go to invasion.

## Patty Cason:

So, the new guidelines really clearly prefer HPV testing. And this is a departure, this is one of the big departures. If the person doesn't have access to HPV testing, for some reason, then cytology alone is acceptable. But if that's going to happen, you have to do cytology much more frequently than you have to do HPV testing because of the sensitivity of the test. So, if for example, cytology is recommended, excuse me, HPV is recommended annually. When we say HPV testing, it means the following either just an HPV test with the ability to then reflex to a cytology, if you have a positive, and to reflex to genotyping typing, to tell you whether you've got a 16, 18 or not. So that's what we mean when we say HPV-based testing either just the HPV test alone with the reflex to the other tests says if it's positive or HPV test plus cytology at the same, in other words a co-test. So, if that is being recommended annually, because the person has had a prior abnormal, and they're going to this much more intensive follow-up of annual HPV-based screening. Then if they didn't have HPV-based screening, they only had cytology. We're going to be asking that to happen at six-month intervals for example, or if the HPV co-test is recommended at three-year intervals, then cytology will be recommended annually.

## Patty Cason:

And the reason for this is that it's just not as good of a test. It's going to pick up less disease initially. And I'm going to show you some numbers about that in just a minute. So another really fundamental concept, not just with cervical disease process in general, but specifically around these guidelines, is that everything that is put into the recommendation, is going to, everything that goes into the recommendation is going to significantly change what that recommendation is depending on what the result is. So, it's not just the current results, it's the past results as well. So, if you have an unknown history, that's also significant. So that's information unknown or something that was abnormal or normal. That's what you put into the app, if you're using the app and that's what was put into the decision tree to figure out what was going to be the next step.

## Patty Cason:

So, if we look at this are our pretty little rainbow here. The box at the top it says expedited treatment preferred is essentially representing the highest risk, either combination of biopsy and pap or the highest risk person based on their past results and their current results. And then we go all the way down to the very bottom and we've got in blue, a return in five years. So that's somebody who is essentially at the risk of a general population that has, that's not in a management paradigm. General population that does not have a history of abnormal. And then everything in between. And it gives you, you can see here that it gives you sort of, how to think about this percentage wise. So, the percent risk is the thing that you'll see right at the beginning. So up at the very, very top. If the person has a 60% risk of having CIN three of having high grade disease, that's why expedited treatment is preferred. And if the person has a less than 15% risk of having CIN three right now, that's what we expect is going on, when we offer screening recommendations. In other words, you screen an asymptomatic population with no disease, and we expect a less than 0.15 risk of the person having current CIN three.

## Patty Cason:

How did we, how did they come up with these guidelines? It was based on the data. The data was based on databases and the major portion of the information that was used, the database that was used was from Kaiser Permanente. It was over a hundred, 1,500,000 participants. They were just people who were having their testing at Kaiser Permanente. And there was a very large number of these that also had HPV genotyping. And this was over quite a long-time span, over 14 years. And, it gave us enough in terms of data points. So the database was large enough so that we could really start to parse out minor differences in percent risk, and make sure that what we're doing with management is appropriate in terms of the risk that we were able to then calculate based on this. And if the person has a past, that was all negative screening and they have been well screened. That's also important information because you can have a longer length of follow-up in that case.

## Patty Cason:

So, you might ask Kaiser Permanente patients are well a screened population. Kaiser Permanente is an enclosed system, and people generally are that, you know, they're generally getting very standardized follow up. So, it is by definition, a well screened population. So, we didn't know, is this population really representative of the United States? Can we really make national guidelines based on this population? So, two other databases, one with 450,000 and one with 200,000 and then another, with 150,000, which was really part of the same database. So, CDCs national breast and cervical cancer, early detection program had one part of the database of people that were rarely or never screened or inadequately screened. And then the other portion of the population were well screened. So, the nice thing about this is that these databases came up with really very similar risk cutoffs, and so there really wasn't discrepancy. What that tells us is that regardless of the population being screened within the United States, we think that these guidelines should be appropriate. I think that's a really important part of this. A lot of providers that I talked to have a sense that they're going to protect their patient better if they do something other than the guidelines, because their patient is special, because their patient has had a lot of sexual partners, or something else of that lifestyle, they've had STDs. Not that they've had a past history of a positive HPV test, but that they have some risk that you're concerned about or a new sexual partner, which definitely is not a reason to do a new screening. It's actually the opposite. Because remember I said, an incident HPV infection is destined in the vast majority of cases to go away on its own. So, we don't want to find something that was never going to be a problem for the person. So all of these people in all of these populations that were represented here, have a wide range of sexual, number of sexual partners, number of sexually transmitted infections, whether they smoke or not, what they have as risk factors for all kinds of other diseases. This was a very varied population. So, I would urge you to think not to specialize your treatment with patients that you perceive to be high risk. Because remember in all of these databases, the thing that was really showing up as what was going to predict the person's risk was their HPV status currently and their prior HPV status, not sexual behaviors.

## Patty Cason:

So, are there other risk factors that influence pre-cancer development?

## Patty Cason:

We know that smoking does right. We know that if you've been vaccinated from it against HPV, that's going to have a huge impact. But, interestingly, all of the things that we think may have some contribution to increasing risk have not been shown to actually alter it enough to do anything special about them in the guidelines other than HPV status. Now, one would say we have HPV vaccination available in the United States. We're trying to have our entire population immunized against HPV as they move past childhood into adulthood. So unfortunately, we don't have that. We want to have really good HPV vaccination coverage in the United States, but we don't have it. So, the decision was made because there just isn't enough. There aren't enough people in the population who have been vaccinated. We don't have enough to justify actually putting that in as an exception within the guidelines. Because if 50% of eligible just female first doses were achieved in 2015, that's really not enough of the population yet. But we're expecting as things get better in terms of having our population vaccinated, then we're going to be able to change the guidelines. So that should happen fairly soon.

## Patty Cason:

The colposcopy threshold is 4%. So, if when you put in the patient's results and demographics and you come up with a percent risk of anything over 4%, that person should go to colposcopy. So that's just something to think, to bear in mind. That was the level of risk that was determined to be most likely to pick up current pre-cancer.

## Patty Cason:

So that would be down here if it's just colposcopy. In other words, if it's between 4% risk of having current high-grade disease and 24% risk of having high grade disease, then the person's going to be recommended to go to colposcopy.

## Patty Cason:

And colposcopy according to the Colposcopy Standards that ASCCP put out. For example, one of the main differences with the way colposcopy should be done from the way it used to be recommended to do it is to do multiple biopsies, at least two, three biopsies. And that's a really big departure for some people in the way they practice. So, if you are above 4%, if your patient is above 4% risk, it's recommended that they go to colposcopy and you can see here, this is how the numbers work. Two examples, one would be ASC-US with the HPV positive, over 4% risk. A low SIL with HPV positives, also over 4%, that's why they're highlighted in red. And importantly, we think of, ASC-US low SIL results. Even if they have positive HPV associated with them as low-grade results. They're most likely in most cases associated with incident HPV infection or with lower risk, less virulent strains of HPV. Sometimes you see changes, and this is a little confusing. But sometimes you see changes on the person cervix that are based on a low grade, excuse me, a low risk strain of HPV that. So, the person's HPV test might show negative, but they've got this sort of simmering CIN one for a year or so two years until the body has cleared that low risk strain. So, it's a little confusing. So that's why we just go with the results. We don't try to figure it out. Well, wait, how could that be? If they have a negative HPV and they have a positive, low SIL, and then they ended up after having that many times they went to colposcopy. Don't try to figure it out because there are so many strands of HPV. The important thing to know is that no low-risk

strains caused cervical cancer. So, they can't cause precancer that will go on to cause cancer. Anytime we test for HPV we're testing for high-risk strains.

## Patty Cason:

But what happens to the same person, who's got the positive LSIL or a positive ASC-US. In other words, positive HPV with ASC-US, or positive HPV with LSIL, low grade changes that we, as I described. If they had a prior negative HPV-based screen. So, if they had a negative HPV private prior, their risk goes from over 4% to under 4%. So, this is a very large cohort of people that now do not need colposcopy that needed it before.

## Patty Cason:

Well that the guideline is for them to have colposcopy. Whereas the guideline would have been not. Now the guideline says that they should not have colposcopy, previously it would have said that they did. So, this is great. We don't want to do more colposcopy than we have to. What we, our real goal is to get as close as possible to doing colposcopy in people that have pre-cancer and not having to put somebody through colposcopy if they don't have it. So, if the person does have one of these low-grade changes and they've had a history of a negative HPV in the past, you can go ahead and extend their time period before they get a colposcopy. And if that subsequent result is positive, at that point, they would go to colposcopy.

## Patty Cason:

Now the immediate risk of having HPV-16 with a low-grade change is very different. And you can see that in, the 5.3, 6.7, these are higher than the low like fours percentages in the fours that you saw when it was just HPV in general, that was positive, not specifically HPV-16. And for this reason, HPV-16 is, it stands out and it's alone in the guidelines. 18 for other reasons, but 16 is in the guidelines as an exception. And this is why, because it is associated with much more precancer and much more cancer.

## Patty Cason:

So we really want to be able to not to treat people, not to test people with a colposcopy and biopsies who are not destined to have precancer and to absolutely focus our resources on those people who, and whom we have found precancer, or we know that we need to look to find out if there is pre-cancer. So, the concepts are similar to the 2012 guidelines, when we really were making that effort to get fewer people, having to have colposcopy that was to come to nothing. But to be able to really focus more intensive follow-up in the people that had high risk changes found on their colposcopy. And this is one thing I find very helpful when talking to patients about it. Because it seems to people sometimes that we're doing less. And that can seem to them like we're trying to do this on the cheap, we're trying to ration care, so we don't give them what the best care is. And this really is not what this is, what we really have been trying to do ever since 2012, and even before, when we were developing the 2012 guidelines, is to prevent somebody from having to go through something that's potentially traumatic, that they don't need, that they don't have to have. And the justification I use with patients that's really helpful is to explain that were something to be detected on this screen that you're having, that was significant. We're going to do a lot more follow-up on you now, because now we understand the risk more. So, we're going to be, assuming that you don't have a big problem, and we're not going to be subjecting you

to tests that you probably don't need. And on the other end, if you do show a problem, we're going to be all over it.

## Patty Cason:

And this is why we want to focus the resource of treatment in particular, on people that have the highest risk, right. So, when we talk about treatment, what's the most aggressive treatment see and treat, right. So that was what we were talking about expedited treatment. So, the reason why we have this expedited treatment is that as you can see, if the person has any high-grade pap with a positive HPV of any kind. So, if the person has CIN three on their pap, I'm sorry, high grade on their pap, and they have a positive HPV test, any positive HPV test, any high-risk HPV test that's positive. They have a very high over 50%, 60% risk of actually having a precancer that day. And if you have done a genotype and you know that that HPV test is positive for 16, they have a greater than 75% risk, which is why expedited treatment is now recommended first line for these folks.

## Patty Cason:

And this just breaks down the clinical action thresholds essentially. So, this is the immediate risk of a pre-cancer for somebody. If it's below 25, then colposcopy and biopsy is preferred, and then if it's, in other words, preferred over expedited treatment. And if it's in that intermediate range, over 25% risk, but under 60% risk because 60% is the cutoff. Then, you could do immediate see and treat expedited treatment. But it's, so it's acceptable, but that's not the recommendation as the first line. Obviously, they would want to have a colposcopy and biopsies, but they don't, it's not preferred for them to have expedited treatment. And then you flip it when the person has a less than 60, excuse me, an over 60% risk. You flip it, and now expedited treatment is preferred. When we say treatment in this case, it's excision. So, it's not ablation. You're not just treating with Cryo or something or a laser where you're treating but won't have a specimen. You're doing something where you're going to have a specimen to send to the lab if you're going to do see and treat.

## Patty Cason:

So that would be LEEP, cone, a laser that actually gives you a specimen. So, we're talking about people having seen and treat means that you're doing this before you have a confirmatory biopsy. So, this requires shared decision making. You need to explain this to the patient. We will have a biopsy to test, but we won't know for a fact that you had something going on that we need you to treat until we get that back. But you will have already been treated.

## Patty Cason:

Other changes, HPV testing at six months after a high grade. So, a treatment of high grade. This is a change and then annually for three years. So, this whole intensive follow-up after being treated for high grade is more intensive than it used to be. And then here's a really big one. This is going to be probably for people who see patients who are post-menopausal and older, the hugest change. Which is for anyone who has had disease treated in the past, and that's a lot of people. They will continue to have screening, surveillance screening, not every five years, every three years. Every three years for at least 25 years. And we don't expect that it's going to ever be less than 25 years again. Because the data as they're accruing are showing that the risk at 20 years and the risk at 25 years are the same. So, we

expect that the risk, there's some degree of increased risk for the lifetime of the patient, if they've been treated in the past for high grade disease. So, what about your patient who has another condition that doesn't give them a long-life expectancy? Please stop screening those people. Please stop doing any kind of intervals of any interval of treatment, excuse me, screening for people who have a shortened life expectancy, because of whatever comorbidity is going on.

## Patty Cason:

So also, we said, if the person's going to have a see and treat, an expedited treatment. Then you want to have excisional, you don't want to do ablative. But in general, now the guideline is preferring excisional treatment over ablative treatment. If the person has a concern for or has AIS, excision always. So, in other words, if there's no personal insight to, or there's some concern about that, then excision is always going to be recommended. And then very also importantly, CIN one. There was a lot of conversation in the meetings about would we go out and clearly say CIN one is most likely representing a transient HPV infection, please don't treat. Which is how the members of the consensus guidelines group felt about it, if it were, they that were to have it. Because in terms of medical risk, that the person is really, probably not at a very high risk. If they are only having persistent CIN one, nothing showing anything high grade. But then we come to the patient. The patient is having CIN results over and over again. They're going through, they're having come in and having repeated procedures and having a repeated testing, and this can be very wearing. So, at some point, a patient may want to be treated. We'd like to ask you not to do that any sooner than two years.

## Patty Cason:

And I mentioned that HPV-18 is special. So is atypical glandular cells, even if it has an HPV negative associated with it. And then clearly ASC-H, so this is something where, there were not enough high-grade cells for the cytopathologist to say that this is a high-grade lesion, or high-grade screen high grade cells, not lesion I'm sorry, high-grade cells then. But they see enough so that they're not willing to call it, ASC-US. This is a significant result. So, we treat ASC-H and AGC differently than the other categories. Because of the percent risk involved, not just of high-grade disease, but of cancer and true also of HPV 18. We said originally that the thing you're looking for is precancer. So, you can treat it and the person doesn't go on to get cancer, and that's the bottom line to all of this. But in some cases, when we looked at the special situation of ASC-H or the special situation of atypical glandular cells with a negative HPV or anybody with a positive 18. What we saw was that the percent risk for precancer wasn't exceeding the 4% threshold, but the risk for cancer was higher than in other categories. So that's why it's treated differently.

## Patty Cason:

So, in addition to the pretty little rainbow telling you that you have the option of expedited treatment, if it's over 60% risk and only coloscopy if it's four to 24% risk. You also have the same percent risks applied to the spectrum of ways that you can follow somebody after having an abnormal screening test that didn't cause them to have a coloscopy.

## Patty Cason:

So, the goal of all of this is to make this simple for us. And I say that, and it sounds so silly because this is such a lot of new information. And the go on the app, when you start to play with it really does feel like there's a lot of information inherent in it, and there is. There was a lot of information that went into changing these guidelines. So, we really need to simplify that. And the way to simplify that is first of all, not to try to look at other timeframes besides the ones we already had from the 2012 guidelines. People are used to having the patients follow up in either one, three or five years. So that's something they're accustomed to already. So, they didn't look at changing that at all, because that would just make things more complicated. Also, there are systems in place to make those follow-ups a reality for your patient based on the laws, based on the, what triggers, what management in your EHR, for example, or in the log that you're using, to follow up somebody with management. So, we wanted to make that simpler, and that's why the intervals remained exactly the same at one, three and five. But you may notice that we did say if your recommendation is to have one-year intervals with HPV-based screening, this becomes six-month intervals, if you're just doing cytology alone. Just remember that.

## Patty Cason:

And all of this is based on when you see an asymptomatic population without a history of disease, and you do a co-test, or you do an HPV alone, you're going to get a less than 1.4, less than one, 0.14% for a co-test and less than 0.12 the opposite. Less than 0.14, if the person has a positive, has a negative HPV. It will predict that in the next five years, they have less than a 0.14% of having high grade disease. If somebody has a co-test after they had. Remember they had no history beforehand; they're coming into the screening with no history of abnormal tests previously. So that person with a co-test that's negative negative is going to be able to feel pretty confident that less than 0.12% of the time, are they going to be having CIN three high grade disease within the next five years. So that's predicting in the future that they're going to be okay up until their next screening test, which is in five years. This is a very low number. So, anything that you do in terms of coming up with how frequently somebody is going to need to come back when they're under surveillance. The number has to be close to this. That's what we're going for. That's why they say one year versus three year versus five years, because we're trying to get to the same amount of ability to predict that in the subsequent five years, the person's not going to develop high grade disease.

## Patty Cason:

So, the five-year clinical action threshold, which is essentially thinking about that. The five year is the normal population. Do I hear a? I thought somebody was going to ask, okay. So, this is what I'm talking about. When it's predicted that they are going to have a less than 0.15 risk of having CIN three in the next five years. That's when you can get a five-year return.

## Patty Cason:

Now, if it's a, if you're going to be recommending a three-year return, that's based on a higher percentage. So, if the person's being screened for CIN, for pre-cancer, then in five years, their risk of progression would be too high. So, you want, because remember you want to bring that risk down to being similar to that 0.12 or 0.14 that you would get with a co-test. So, you need to go to three years because it's at 0.33 and 0.45, which is too high.

## Patty Cason:

So, we're looking to get below 0.55, for three years. If you go above 0.55, then you're going to be going for a one-year return. So, for the, between 0.15, which would give you a five-year return and 0.55 you're going to do a three-year return. If it's above 0.55, but under 4%. Because remember that 4% is for colposcopy.

## Patty Cason:

So, if it's above 0.55, but under 4%, you're going to go ahead and do a one year. Here's just some examples of how three-year returns look. And same thing with the one-year return, it's essentially 4% or above. You're going to have obviously going to colposcopy. And as I said earlier, if it's greater than 0.55%, that and less than 4%, you're going to do three years, and then one year for above, 0.55.

## Patty Cason:

Here's another example, HPV positive with a normal pap, 2.1% immediate risk. HPV negative with low SIL 1% immediate risk. In both cases, this is above 0.55, so the person's going to come back in a year.

## Patty Cason:

And then these are things that you'll see after colposcopy that again will give you above 0.55 risk, but below 4%, and that would be. A low-grade pap brings you to your colposcopy. The result of the colposcopy is less than CIN two, in other words, a lower grade result. Then that gives you an immediate risk of 2%, and the other, an immediate risk of 3.1%.

## Patty Cason:

So key changes that I mentioned earlier, I did talk about this earlier. But I do want to say that any, so we are very strongly recommending HPV-based testing. So, the entire management strategy is based on these recommendations as are the screening recommendations. And once you've gotten a positive, then you should have the capacity at the lab and the way it's testing, the way that you're doing the testing, to be able to then reflex to cytology and also be able to reflex to genotyping, or even get genotyping initially when you get the positive of the HPV. So, it's better if you can do it to have that in the same laboratory specimen. If it's not possible, then you could have them come back. But if the person has a positive HPV, that is 16, then they're going to go to colposcopy anyway. So, you don't need to do the cytology. If you didn't have enough of the specimen to be able to do cytology, and the person had a 16, you can just do the cytology at the time of the colposcopy. But otherwise you would want to bring them back and do the cytology. If HPV-16 and 18 is positive, then these people have the highest risk of having, as I said, with CIN, excuse me, with 16, the highest risk of high-grade disease. And with 18, well, it doesn't have the highest risk of high-grade disease. It has a higher than acceptable risk of cancer.

## Patty Cason:

And the hope with these guidelines is that they're going to take us into the future for an indefinite period of time, because they're done in such a way that they are able to be modified. So, the thing that we expect to continue is the percent risk thresholds, the 4% for colposcopy, et cetera. All the things I've been talking about. And as people are becoming vaccinated and CIN three is going, you know, hopefully

in the country way down and hopefully getting diminishingly small. We're going to change the recommendations for management screening, because of the present risk that we're going to be seeing. So as the present risks change, we're going to change the management accordingly. We're not changing the thresholds at which we're going to do one thing versus the other. But we're going to change the, what kinds of results constitute those thresholds, will bring us to those thresholds.

## Patty Cason:

Oh, the other thing is we, when we have a population who are being properly screened with HPV-based screening. With each subsequent test, it predicts better and better that the person's going to not have high grade disease in the future. So that test becomes, because remember HPV persistence is the thing that's associated with high grade disease. So, if they have multiple tests over multiple five-year intervals, that's giving you a lot of reassurance. There's a lot of technology right now in development, and it's going to potentially the way that we do manage it. But the way the guidelines are set up, it's designed to be able to include these in the management strategies. Because again, we're going to use the percent risk as the thing that's the decider.

## Patty Cason:

So, the test characteristics will be essentially compared to the thresholds we already have. And in some cases, that's going to be based on the industry sponsored trial. In some cases, it's going to be conglomeration of several different clinical trials, and they come up with enough of a database to be able to give us a percent of risk. So, at that point, when we have enough information that we're going to get enough of a population, enough of a database to get a percent risk, that's the point at which those tests will be put into the guidelines.

## Patty Cason:

So, there was a lot, there were a lot of people that went into this in addition to ASCCP, the voting participants and the Kaiser Permanente team. As I said, the National Cancer Institute did all of the, running the percent risks. So, they're the ones who gave us those numbers. And then all of the steering committee and working with participants.

## Patty Cason:

So now I'm going to turn this over and Dr. Policar if you want to take over here.

## Dr. Michael Policar:

Great. Okay yeah. I do have two questions for you first, before I close things out. Just because, I mean, there were many, many things that you brought up that were, really significant changes about how we've been doing things. But I want to ask you two questions specifically, based on your decades of experience as an expert colposcopist. So, one of the things that you mentioned is a recommendation that we should be doing, between two and four biopsies routinely. So, what if a patient is referred in, because she's got a high SIL on cytology, you do her colposcopy, it's adequate, same as satisfactory. She has a small one quadrant, I see the white lesion, kind of plus minus connotation. Okay, and it's only big enough for you to do one biopsy. So, in that case, do you really need to do three or four biopsies or two or three biopsies? And if that's the case, do you obviously biopsy the lesion and then do you also biopsy

an area that looks normal? So how do you put that two or three biopsy recommendation into clinical practice?

## Patty Cason:

Endocervical curettage for one thing. It's a matter of contention, people are discussing it. Whether, the concept that you're asking about is do we do blind bio, do we do biopsies in tissue that looks completely normal. So, you're going to have opinions both ways. I think the most important thing about the case you told me about just now would be to look in the vagina, actually. If you're not finding the disease that was represented on that cytology. So, another option is depending on whether they had a positive 16 or not, you could do the see and treat at that point, obviously. But I would say my personal, what I would do personally is I would do, I would do the biopsy of the area. I would do an ECC. I would look in the vagina. It's really nice to use Lugol's, to look in the vagina. It's, I call it an idiot test for myself. It's just to see where the spot, where you need to biopsy. And then, yeah, I would do a random quadrant, the other three quadrant biopsy, that's what I would do. Other people wouldn't necessarily so.

## Dr. Michael Policar:

Right. Okay. All right. Well good thanks for your opinion. So, here's the other one, and this one relates to a lot of family planning clinics. So, near the end, you said that excisional treatment is preferred over ablative therapy. And so now the question is, do you think there's still, you or the whole committee think there's still any role for cryotherapy?

## Patty Cason:

Oh definitely. Oh definitely.

## Dr. Michael Policar:

Bio is ablative, it's not excisional. But it seems like the recommendation is that it's better to do a loop excision than it is to do a Cryo. So, what about that?

## Patty Cason:

It is, but the other thing that the committee was really cognizant of is that the data looking at adverse potential effect on birth outcomes, and, you know, this is important, are not seen with Cryo. So that's actually a really important option for us. And if you, you have to follow the rules of Cryo. You can't have a disease that extends into the canal. You have to have something that's, you know, really limited to just the small area, that's able to be put underneath the cryoprobe. And, you know, if you fulfill all the criteria for being safe to do Cryo, then it's a perfectly valid option. But in the studies, it's just not quite as good, and you don't have something to actually look at in the lab afterwards. But if, certainly if the person has concerns about future fertility, it's a perfectly reasonable option if they are a candidate for it. And it was actually, there's a lot of other things that, I mean, this is beyond these guidelines. But there are a lot of other ways that you can use cryo. They're beyond the scope of this talk. But it's definitely not something that anyone on that consensus work group wanted to throw out as a treatment option.

## Dr. Michael Policar:

Okay, great. I mean, I think it's really important to hear that. Because when people read the guideline, and they see that excision is preferred. You know some folks who are going to interpret that like NEC category four, you know, in terms of Cryo and just stop doing it. And I agree with your answer that it still clearly has a role, as long as you follow the rules about the fact that it's a completely visible lesion, that is to say a satisfactory colposcopy make. Either unnecessary ECC or a negative ECC and a small leak, just one or two quadrants because with larger regions, that's when you'd rather do an excisional procedure than you would in an ablative procedure, like a Cryo. Okay, let me go ahead and wrap up, and then we'd love to have your questions. So, Patty did a fabulous job of explaining both the app and how the guidelines are different than they were before and why they're different from before. So that's kind of your homework once you, once this is over in terms of how to implement these guidelines in your practice. Well, first off, I think that it's important that any of the clinicians in your clinic, particularly colposcopist, but other clinicians as well, or other staff that you have that are doing client follow-up, really should get the app. Either that or should become quite familiar with and facile at using the online version that's free at the ASCCP website. As Patty was saying, it's not up and running yet, but it will be soon. And those are the two different ways. But you should try to make that transition to using these new guidelines as quickly as you can. Number two, most clinics do have clinic protocols, and it's going to be time to update your clinic protocols, both for cervical cancer screening intervals ages, if you haven't done that so far. You've already heard about the preference for using HPV-alone screening. Although you can continue the co-test as well as your protocols for colposcopy. Next is at some point you might think about doing an in-service of your entire staff regarding the 2019 guidelines. Because it certainly in any family planning clinic and virtually all primary care clinics, of course they know the GYN practices. It's going to be important that all the staff, the front desk, the back office nurses, that you know, your health educators, everyone, in addition to clinicians is up to date on how these guidelines are different than how we used to do things before. Next is that there might be a few cases where you have to inform individual clients that are under surveillance now that their management might be a little different based on the updated guidelines. Particularly in terms of the frequency that they come back or when they do come back, having HPV-alone screening. And then lastly, watch for updated coding and billing policies from your payers. They haven't happened yet. I mean, these guidelines are so new that Family PACT has not issued any changes nor has Medi-Cal, nor has Every Woman Counts program in California. But we would certainly forecast that by later this year, probably in the fall. You will be seeing a new coding and payment policies that come from not only your state payers like Family PACT, EWC, Medi-Cal, but you'll probably see that from your commercial payers as well. So not yet, but on the way. So, with that, I will stop as well. And, I phone back to Nicole. And if we have any questions, she is going to direct them either to Patty or to me. I think you're muted.

## Nicole Nguyen:

Yes. Hi, sorry about that can you hear me now?

## Dr. Michael Policar:

Yes.

## Nicole Nguyen:

Yeah. Okay sorry about that. So, let's start with the questions. So, this one's, first one is for Patty from Joanna. I love to be able to interpret without the app or internet-based app. Are there PDF, the algorithms, like those last guidelines or another way to do so?

## Patty Cason:

Great question. No. But the two papers that went into the guidelines that were published that explained all of the data and the databases and how things were arrived at. Those have algorithms in them, their figures. So, you could print those out and just make them large for yourself to see if that's how you want to do it. And there are, I mean, these figures do exist, and they are part of the algorithm, part of the app. So, it's not that we don't have algorithms anymore, we do. And actually, when there's not a change of like the ones I described, it's going to be the same as the old algorithm actually, in some cases.

## Dr. Michael Policar:

Let me add my two cents worth though and that is I did read both of the papers. They're really good, they're really, evidence-based, they're very, very dense. So, they're not going to be, I think the kind of resource that you'll be able to jump to immediately in clinic and use the papers as a way of making decisions about the, about the management of individual clients. You will find that's going to be so much, not only better, it's going to be way more personalized if you're able to do it either with the app or on the website. And you know, that, to me that was one of the really impressive things about this guideline is the fact that they emphasize over and over about the fact that this has now become a more personalized management approach for each individual client, especially because it takes into account Cryo results. But no more is it like going through the algorithm, you know, from the top to the bottom and sort of one size fits all basically. Now this is much, much more adjusted to the individual client, particularly based on her past history, as well as her current history. And I think you really need the app and you, or you really need the website in order to take full advantage of that.

## Patty Cason:

Or if you're somebody that's super academic and you really want to through it with a fine-tooth comb like you did. Because the figures are there. If I were going to do it that way, which I wouldn't, I would do it with the app, absolutely. But if I weren't going to do it with the app, as I said, I would print out just the algorithm. So, in other words, you're asking to use the algorithms and those are figures and I would just make them larger. It's a lot of sort of making something yourself. Maybe in the future, somebody will do that and put it out for people that like it. You know, there's always those sort of aftermarket things that happen. So, stay tuned because it might be on, there may be some indication that there's going to be something like that available. It won't be anytime soon though.

## Nicole Nguyen:

Okay. All right. And the second question is also for Patty. Will the existing app be updated, or will we have to purchase the new updated app?

## Patty Cason:

Yeah, that's a really good question. So, the old app is not being updated. This is a brand-new app and you have to buy it again. But once, the idea is that once you've bought this one, all of the potential changes that are going to come about because of testing, that's going to be available, that we didn't have, you know, technologies that we don't have available now that we will have. Information that we get, that we don't have now, and the impact of immunization, which is a huge, huge thing that's going to change. And not, that is not in the very distant future that's coming up fairly soon. So as those changes happen, the guidelines will be changed within the app. The app will be updated, and you won't have to pay for it. That's the goal. That's the, I'm going to say, that's not just the goal, but that's going to happen. The intention is just to buy it once.

## Nicole Nguyen:

Okay.

## Patty Cason:

During, that's what the whole ideas is, that was one of the main ideas on it. Is that we don't have to keep having consensus conferences, and then coming up with these big guideline packages for you every seven years, instead as things happen in real time, we can update.

## Nicole Nguyen:

Okay and this one's from Sharon. I'm confused about cytology and HPV testing annually versus quarterly six months.

## Patty Cason:

So, if you are using HPV testing. HPV-based testing means either you're only testing for high-risk HPV. And if it's positive you're going to then reflex to a cytology from the same specimen, and you're going to want to get the genotype as well. If it's positive if the HPV test is positive. So that's an HPV test. HPV-based screening is either that test plus a pap or that high-risk HPV test alone. If you don't have HPV tests available, if that's just not something that's available within your system or for the particular patient, for some reason. That's when you go to six months. So that's when, if the recommendation is a surveillance of everyone year, because it's above 0.55%. That's the point at which you're going to instead of doing one-year return, you're going to do a six months surveillance return.

## Nicole Nguyen:

Okay. So, we have a lot, so we'll try to go through this quick. So, the next one is also for you both. Can the speakers address--

## Patty Cason:

Wait I'm sorry cytology. I want to underline cytology because it's not as accurate as HPV testing. It's really taken a pretty big back seat. We're all used to pap and I understand that, and you know, we've all been working on it for years. It just isn't as good at predicting what we want to predict, which is pre-cancer. So, it's just not as good. And so that's why it takes a backseat. That's why we have to do it more

often. But people often get confused and think that cytology is a way that you can predict the disease. It's essentially often mistakenly scooted into a diagnostic category when it's supposed to be in a screening category. So, if a pap is showing low grade versus ASC-US, like one time it's low grade, one time it's ASC-US, one time it's ASC-H. That doesn't give you a diagnosis. It gives you a red flag that then you will do surveillance on to decide at what point, if ever you need to actually do the diagnostic test, which is the colposcopy. So, don't be confused by trying to parse out serial pap tests and think that, oh, they went from low SIL to ASC-US they're getting better. That's not the way we use it at all. It's not diagnostic. Sorry.

## Nicole Nguyen:

No problem. Okay, the next one is for you both. Can the speakers address HPV vaccination after age 26?

## Patty Cason:

Do you want to go first?

## Dr. Michael Policar:

No, you go ahead, it's good.

## Patty Cason:

Okay, so the vaccine has the indication to go up to 45. I personally feel like this is a really good time to do some shared decision making. Your typical person that would be the perfect candidate to have HPV vaccination after the age of 26 would be the person who hasn't ever been exposed to HPV in the past, because they haven't ever had anybody touch them below their belly button ever in their life. No skin to skin contact below the waist. And now they are going to be having skin to skin contact and potentially with, you know, other unnamed numbers of partners. That would be obviously the slam dunk person that would want to get it for their own benefit. We think that in general, if somebody is over 26 and they've been having sex since their late teens, early 20s, and they have had some number partners. They've probably been exposed to at least some of the strains that are in the vaccine. And so therefore there hasn't been a lot of ability to say that doing that prevents disease on a population level, that it really actually impacts it in the way that using immunization prior to exposure to HPV would do. But that doesn't mean that in a given individual, it couldn't have value. So, it becomes really a conversation about, you know, coverage and what they anticipate to be the way they want to conduct themselves in their sexual life. And it's a conversation at that point. But I will say that we haven't had an abundance of data saying that, if you immunize people from 26 to 45, that you're going to have a huge impact on high grade disease nationally in terms of numbers. That just hasn't been shown to have that kind of really big impact that you see with people who were vaccinated prior to exposure to HPV. Another thing I think that we're going to see, and we're getting more data about this. But HPV vaccine is not a therapeutic vaccine. If you're, if you have disease, it's not recommended that you get HPV vaccine to treat the disease. However, if you have HPV-based disease, which is cervical cancer or precancer stage, it's because of HPV, and you were to get immunized where you haven't been before. You will be immunized against the other strains. There is a factor in who gets precancer and who has persistent HPV and who gets cancer, that's essentially the host, these are host factors. We don't know what all those host factors are. Some people seem to be much more susceptible to persistence. Some people seem to clear HPV

better. Some people tend to have precancer more. We don't know what those host factors or why some people are. So, if somebody should already have disease, then we know that they at least probably have some host factors that might make them more vulnerable. You could argue that that would be a population that would be potentially benefiting from vaccination at that age, not as a therapeutic vaccine. But definitely for preventing disease in the future, which is also quite important. Now you're going to go ahead, and you have to disagree with everything I just said. Take your time.

## Dr. Michael Policar:

I think that was great actually.

## Nicole Nguyen:

This next one is for Dr. Policar. So, does Family PACT cover all HPV-based screening and surveillance strategy as recommended in these guidelines, including genotyping two subtypes? Any particular recommendations of one type of LBC, such as Sure Path versus Thin Prep for these purposes?

## Dr. Michael Policar:

So, the answer is that yeah, Family PACT does cover all of these strategies as long they are consistent with the recommendations of the U.S. Preventative Services Task Force. And you remember how they are broken down into different age categorizations, primarily for our purposes, for women between 21 and 29, and then 30 up until 65. But particularly for the group of females that are 30 and older, either surgical cytology alone, or HPV alone, or co-testing. Any one of those three are considered to be benefits for the purpose of a Family PACT. Now then the next question is, is does Family PACT cover genotyping into subtypes? And the answer to that is yes. But there is sort of the caveat to that, and that is to say that if you're doing, let's say HPV-only screening, okay. That test looks for 14 different types of HPV, including 16 and 18. And so if that initial test is positive, okay, then subtyping it into 16 or 18 or both is considered to be acceptable. But you have to have a positive high-risk HPV panel for all 14 types first, and then if that's positive, then that will reflex to the subtypes of 16 and 18. You couldn't order 16 to 18 by itself. You have to go through having the high-risk HPV panel as a 14 first and then later as a reflex. But Family PACT has covered that since last fall. The other part of the question is, does family pack have any particular recommendation for liquid based cytology? There are a variety of products out there, Thin Prep, Sure Path. Even some other like homegrown varieties, and also Family Planning and Medi-Cal have no recommendation about that. That's really up to the decision of the individual clinic or clinician and the labs that you work with.

## Nicole Nguyen:

And so, these two are ask--

## Patty Cason:

With the cytology question. There's sort of common misunderstanding across the country, that liquid-based cytology is better than what we used to have with the with the slides, you know, traditional pap. And it isn't better, but we all have adopted it. But when I say we all have adopted liquid-based cytology, not every single site has liquid-based cytology. Some still have conventional slides. If you do, that's not a problem from a cytology perspective. It is through a problem because you don't have a medium with

which to do an HPV test at that point. So, liquid-based cytology isn't. If what you're going to do is only cytology screening. You do that with conventional slides as well. But we would really urge you to get the ability to do HPV screening and testing.

## Dr. Michael Policar:

In reality the main reason for the proliferation of liquid-based cytology is it makes things easier for the labs. They have much greater throughput when they use it as liquid based. Because it cleans up the background so much that a cytotechnician can look at many more slides per day. So, it's primarily for the benefit of the lab, rather than us. Because I agree with Patty that the accuracy is probably about the same.

## Dr. Michael Policar:

Another question that I see that Nicole's probably going to ask me next, but it's important. And that is, is LEEP covered by Family PACT? And the answer is yes, it had been all along. But remember there are a couple of different varieties of LEEP. So, one is the excision, and here when I'm talking about varieties, I'm talking about not only how they're done, but the CPT codes that have used. So, one is an excisional LEEP, and that has been covered for at least a decade, by Family PACT. Although interestingly not the see and treat, the expedited treatment you've been hearing about. The old expectation is that the LEEP would be based on biopsy results. So, a CIN two or a CIN three lesions. There is another CPT code for LEEP, which is basically a LEEP cone. And that one is not covered by Family PACT. I'm 99% sure, I'll have to look this up, that it would be covered as part of the EWC program or the BCCTP, the treatment program. But that's something that hypothetically could change in the future. But definitely the only benefit at this point, for Family PACT is the excisional.

## Nicole Nguyen:

Okay. So, the next question is. Sorry let me pull that up. Oh, what do you recommend, what tests do you recommend for HPV testing alone?

## Patty Cason:

Did you say what test?

## Nicole Nguyen:

Yeah. What test do you recommend for HPV testing alone?

## Patty Cason:

That's a really good question. There are a very large variety of HPV tests that are done in laboratories that are, they use their own controls within their own lab. And they, we fondly call them homegrown, and they have not been FDA approved for that purpose. That doesn't, it's not like it's, it's not the same kind of FDA approval that you would get with a drug. It's just that FDA says that this test is approved for this purpose, and it really doesn't mean it's the only test you can use. In general, it doesn't really mean that. Now, I'm going to back off from that and say, from an ASCCP and consensus guidelines perspective, absolutely prefer tests that had been FDA approved for that purpose. So, there's really only two right now, and there should be more in the future. But look for a test that you know, is FDA approved for

primary HPV screening. There are other test that are approved for co-testing that aren't yet approved for primary screening. We expect they will be, but they don't have the data yet. So, it's, with the HPV as an approved test.

## Dr. Michael Policar:

Is that the same as being FDA cleared?

## Patty Cason:

It's the, the right term is cleared. Thank you. It's not approved tests for drugs, FDA. I'm not even sure that cleared is the word.

## Dr. Michael Policar:

Laboratory tests they clear them, as opposed to drugs, which they approved.

## Patty Cason:

Right.

## Dr. Michael Policar:

Yeah.

## Patty Cason:

They give their stamp.

## Dr. Michael Policar:

Exactly.

## Nicole Nguyen:

Okay, so we are the 1:30 mark. We have three tough potential questions. I don't know how you feel about maybe just going through a few more, and we will record this. If you have to leave early, feel free, we will send out the recording. But I want to be respectful of both your time.

## Dr. Michael Policar:

So, Nicole we can take a couple more questions. But I also want to remind everyone that what we don't get to we typically, Patty and I will go through the questions afterwards and then we will, we'll post on the familypact.org website. A written Q&A like a week or two from now for the questions that we haven't gotten to.

## Nicole Nguyen:

Okay. So, I'll try to go through some of the short questions. So, this is for Patty. Will the app provide pictures of abnormal cervix?

## Patty Cason:

No, I'm sorry. That would be so nice, wouldn't it?

## Nicole Nguyen:

So. And then this for Dr. Policar. Does Family PACT pay for co-testing in women under 24-years-old?

## Dr. Michael Policar:

Well certainly not as a screening test. And Patty can help me on this, but under 24 it probably would not be a co-test. It would only be an HPV alone test as a follow-up, correct?

## Patty Cason:

Because I figure they screen, they don't clarify HPV. They pretty much don't clarify when they say HPV-based screening between HPV-alone and co-testing. But I just want to put out there that, don't. If you possibly can unless the person is on a management algorithm where they must be followed up with an HPV-based test. If you screen people under the age of 30 and certainly under the age of 25 for HPV, you're going to find HPV and it's going to be the vast majority of those are going to be just incident HPV infection. So, what you will have done to this person, who's just coming into their sexuality and they have, they're just starting to sort all that out. You're going to hit them with, you've got a cancer-causing virus that you got from somebody that you had sex with. And generally, when you have sex with somebody, you love them, and you trust them. And you've just been given something that could kill you from this. And, when, it's going to go away by itself, almost always. So, we really try not to test people under the age of 25 for HPV, with the assumption that by and large, most of them will have it. It's kind of a developmental stage.

## Dr. Michael Policar:

Well, it's really clear that we would never do an HPV test as a screening test in a person that's under 30. The question is, is it part of the now management algorithms or the surveillance algorithms? Let's say for a person who is 23, who maybe was treated for a high SIL with a Cryo for example. And in subsequent follow-up, would HBV be a part of that? And my recollection is that HPV alone would, but not doing it as a co-test.

## Patty Cason:

I'm just looking, I didn't know that that was the case. So, I'll get back to you. Think of another question, I will get it up by then.

## Nicole Nguyen:

Yeah so for Dr. Policar. Are there any coding or billing changes that you anticipate?

## Dr. Michael Policar:

Well for now the answer to that is no, nothing's changed. Going forward, yes. I think that in the fall, there will be at least a few changes in two different parts of the PPBI. One is in the section called family planning related benefits or Fam-Ben related. So, it's the, the non-contraceptive benefits in Family PACT.

It has a section that has to do with cervical cancer screening and colposcopy benefits. So later in the fall that will be updated. And then the other section of the PPBI is in the lab section, and that will be updated as well. I definitely can't give you a date and it hasn't been determined yet exactly what those changes will be. But nothing for now, keep your eyes open. I'm sure there'll be a blast, e-blast, a news blast sometime in the fall to let you know what those changes are.

## Patty Cason:

So, I didn't see anything in the app for people, for that younger cohort of just doing HPV. It always says HPV-based testing. So, I'll keep looking, but I haven't found it in any of the possible options yet. I don't know where you saw that, but.

## Nicole Nguyen:

Oh, okay so this is for Patty. Will the ASCCP text us the updated? Should the current edition continue to be the recommend use for cohort providers.

## Patty Cason:

Yeah. I mean, I think that the textbook is it's old now, obviously. And it's so, so many of the concepts that are in there are going to remain. So, you can use the textbook, it's got pictures, it's got technique, lots, and lots of fine-tuned things about technical ways to do things with colposcopy. And it does a great job of explaining some of the science behind it. Now that said, if you, you have to remove anything in your mind. Remove anything in the textbook about guidelines or what to do next or any of that, because the guidelines completely supersede all of that. And the other thing that's even more, probably relevant is that the colposcopy standards that I mentioned will have, in some cases, some differences. Although now I edited the textbook and I read every word over and over. So, I should remember, but I don't remember completely whether it already was. I think we were already recommending multiple biopsies at that point, I'm 90% sure. But if I'm wrong and there's some part of that textbook that doesn't say that if it says, oh find the nice lesion that you are most worried about and take that, that's don't do that if you see that. Now it will also say that we are not at this point talking about doing a new text, an updated textbook at this point. It's sort of like the guidelines have been occupying everything.

## Nicole Nguyen:

This is a question actually very relevant to this time right now. How do I advise patients who are due for their pap, but leery of unnecessary exposure to COVID-19? How much leeway do we have?

## Dr. Michael Policar:

All right, I will take one. Then Patty can add to whatever I leave out of it. So maybe about four months or so ago ASCCP, actually issued guidelines about, about the follow-up that should be done relative to the public health emergency. The kinds of things that could potentially wait until the public health emergency is over, as opposed to those circumstances where we really needed to try to get people in for an in-person visit. And what we'll do for you is we will, number, two things to tell you. Number one, those are actually on the familypact.org, COVID-19 section of the website, where we've, we have a link to that ASCCP guideline. I think they're also listed. We covered those in a webinar that we did a couple of months ago that had to do with COVID-19 about specifically what those ASCCP recommendations are

about either delaying or trying to do in-person visits right now. And we'll also include them for you in the written questions and answers. But like I said, they're very easy to get to, if you go to asccp.org to their website. There's a COVID-19 section of the menu, and from there, you can see exactly what their recommendations are about who needs to come in now, which are mostly people with high-grade lesions, awaiting treatment, or very scary cytology results. While people with low-grade lesions can definitely wait it out.

## Nicole Nguyen:

Okay, and this one's for you Patty. Is HPV self-testing possible and acceptable in the U.S. yet?

## Patty Cason:

That's a great question. I consider HPV self-testing to be of extreme benefit for the future. We are getting data daily about how this is an acceptable way to do it. So, I think we're going to find that it is close in terms of sensitivity. It seems like that's what all the data is showing and what a wonderful option, because our patients can do it from any remote area that they're in. If they have a history of trauma and they don't like to go to the provider if they have. If they have any technical, excuse me, logistical reason with their family, why they can't get in. You name it, there's a million reasons why people are under screened or unscreened. And many of those reasons can be addressed by self-sampling. So yes, it will be, it's definitely a very hot topic, and it's going to be top line in the near future I think as an option. It's not yet integrated into any of this, but it will be soon probably based on all the data that we're seeing. And also, the sort of chatter is pretty excited about it because it's. Especially now we're in a pandemic amazing, if somebody could just screen themselves at home and mail it in and nobody has to be hands on with anybody.

## Dr. Michael Policar:

Yeah. I'm going to go back to one topic very, very quickly while Nicole was reading questions. And that is, let's say the patient does need to come in for a colposcopy. She's part of that ASCCP updated recommendation, which says, yeah, we really would like to see her in the next month or two, and now it's time to do that. You know, that's a whole talk in itself, but just to bring it down to, you know, the most essential things is number one to make absolutely sure that everybody in the room has a mask. Make sure that the person doing the colposcopy has eye protection. And if there's someone up at the head of the table that is kind of talking to patients through it, they should be wearing that protection as well. And also make a point of doing colposcopy in your largest exam room with the best ventilation. The one thing you want to avoid is a real small room, that doesn't have any ventilation. So, try to use the biggest room that you have, hopefully with negative ventilation. If not, if that room has a window, open the window to try to get air circulating as much as possible. But the most important things are masks, eye protection, big room, lots of air circulars.

## Nicole Nguyen:

And then this one is from Elliot asking. Why the aggressive approach with biopsy, won't this compromise woman's fertility? And isn't there evidence, given the case of CIN three those lesions can regress on their own?

## Patty Cason:

Wow, that's a lot of good questions packed into one. Okay, so first. Biopsies have not been shown to be associated with any impact on fertility. The tissue that's removed is such a small amount. The body grows it back quite quickly. So that's not a concern. Biopsies are and can be painful. But some of the ways that you can make them less painful is to make sure your instruments are super, super sharp. Meaning that you don't go through, you know, multiple clinic days of colposcopy without sending them in to get sharpened. And you don't throw them into the bucket, you just placed them down. There's a lot of things you can do that can make your instruments more dull. And we've actually got some data showing that using some topical lidocaine on the cervix, a little bit of, not a block, but a little bit of topical lidocaine. Not topical, I'm sorry we do inject it, but it's local. Will help with the pain and for those of you, this is not for everyone. But some people find it very successful to put the biopsy instrument, right against the cervix, press into the tissue and then have the person cough as you take the specimen. That's not for novices, and only if you have been doing it, practice it a little bit, get used to it. It's not something that you want to do right away when you're first learning. The other part of the question so was about do multiple biopsies affect fertility. And what was the other part of the question?

## Nicole Nguyen:

Oh, it was about, sorry. I lost it. I'm sorry I was reading these questions. Oh. Oh, and is there evidence in the case of CIN three those lesions can regress on their own?

## Patty Cason:

Okay, that's a critical point. Yes, absolutely it can regress on their own. But do you remember the chart that showed the percent progression to cancer? Because yes, they can, but they, but CIN two is more likely to regress. We don't even think of the concept of progress regress when it comes to CIN, one we think it's its own thing and it's just a transient HPV infection. So, will something progress from CIN two to three and three to cancer. The cutoffs sort of becomes three because once it's three, absolutely anybody can regress at any time, but it's just much less likely. And the downside risk is too big because if you don't treat it, it can progress to cancer. And we don't know how long that's going to be, because we don't know how long that person's had CIN three necessarily. We may not even know when they, how long they've had the HPV persisting. We don't have that information. We don't have technology yet to tell us that. So, in answer, yes it regresses. But we don't consider that to be a safe enough option to offer it to our patients. So, we don't, we consider the cut off for pretty much treating anybody who's not pregnant is CIN three. Because of the--

## Nicole Nguyen:

Okay, yeah. All right, so there's this one last question about the one 145 mark. So, this is about to ask. How far back do you consider paps' history for the average of the results? Like do you go back farther than, is there a way to input results older than five years, for you to consider that as well?

## Patty Cason:

Yeah, the only results we can put in from way along ago. They'll let you put in two paps results, but they won't let you put in every single result. And the only time when that's an exception is when it's a

histology. They can let you do a history of what was the original offending disease process that brought the person into the management paradigm.

## Nicole Nguyen:

Okay so that. We have a lot more, so we will collect all these questions and give it to our speakers so they can answer, and we'll send the questions out with the responses. And that concludes our webinar today. Thank you, Mike, and Patty, for this wonderful presentation, it was really helpful and yeah. And we have the evaluation at the end, so we hope that you please fill it out so we can get feedback on this and any future content. So, with that, we will conclude our webinar. Thank you all for attending today. Have a great rest of your week.

## Patty Cason:

Thank you.

## Nicole Nguyen:

Bye.

## Dr. Michael Policar:

Bye.