Clinical Practice Alert: Cervical Cancer Screening and Emergency Contraception
March 24, 2020

Renyea Colvin:

Good afternoon and welcome to today's webinar entitled, "Clinical Practice Alert: "Cervical Cancer Screening and Emergency Contraception." My name is Renyea Colvin, Program Manager at the California Prevention Training Center. The CAPTC in contract with the California Department of Health Care Services Office of Family Planning is sponsoring today's event. Before we get started with the webinar, let's go over some housekeeping slides.

Renyea Colvin:

First, please check your audio and select your desired settings to join through your computer or your phone. It's recommended that you join through your phone if possible, to limit into any interruptions that may occur due to bandwidth issues.

Renyea Colvin:

Second, please check to make sure that you are able to see the Viewer bring in the slides on the GoToWebinar control panel. This should either be on the left or right side of your screen.

Renyea Colvin:

Third, please make sure to submit your questions and comments via the questions panel. We will respond to any questions that you may have at the end of today's webinar. Responses to any questions not answered by the presenters today will be sent out to participants later, along with the recording of today's webinar and the presenters' slides.

Renyea Colvin:

Now, I'd like to introduce our presenters. Our first speaker for today will be talking about cervical cancer screening as it relates to the new Family PACT benefits. Dr. Michael Policar served 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 Health Care Services Office of Family Planning. He currently serves as Professor Emeritus of Obstetrics, Gynecology and Reproductive Sciences at UCSF. Our second presenter is Dr. Nicole Economou who will be talking with us about emergency contraception. Dr. Economou is a first year Family Planning Fellow at the University of California San Diego. She completed her residency in Obstetrics and Gynecology at Los Angeles County USC Medical Center in 2019, where she served as the Education Chief Resident during her final year. Prior to medical school, Dr. Economou worked as a clinical research coordinator in the Center for Women's Mental Health at Massachusetts General Hospital. Her research interests center around improving access to family planning services, especially among women with substance abuse disorder.

She's particularly interested in investigating non-opioid and non-systemic medications for pain during and after gynecological procedures to decrease overall prescription narcotic use. And with that we can begin with Dr. Michael Policar.

Dr. Michael Policar:

Great, thank you Renyea, and thank you to all of you for joining us today. I know that it's a very stressful time and probably seems a little odd that we're talking about these two clinical practice alerts rather than how family planning clinics can be responding to the COVID-19 epidemic, but I'm sure that there'll be more on that topic to follow in the next few weeks both from the Office of Family Planning and a variety of other places. Just to remind you about how the clinical practice alerts work in Family PACT, for those of you who have been Family PACT providers for quite a long time, you will remember that previously, we had a whole set of about 18 different topics for clinical practice alerts in the Family PACT program. Sexually transmitted infections, a variety of contraceptive methods, other topics, they were put on hold for a few years but now we're trying to reactivate this process of developing clinical practice alerts on a variety of topics, which you'll find on the familypact.org website. The first couple that we did have to do with gonorrhea and chlamydia screening. We did those this past summer and had a webinar on that topic. And now today we'll talk about an update in cervical cancer screening and emergency contraception. So, there we go. Okay. A little too fast there, I need to go back one. There we go.

Dr. Michael Policar:

So, I'm going to start this discussion about cervical cancer screening guidelines in 2016 before relatively newer guidelines came out. And, of course, I'm sure you're familiar with the way that we had previously recommended cervical cancer screening intervals and in different age groups. So, the way that this table is laid out is based on a variety of groups who made recommendations about cervical cancer screening ages and intervals. Starting with the first line, which is the U.S. Preventive Services Task Force. The second is a guideline called the Triple A Guideline referring to the three different groups that were involved in developing this guideline. The ASCCP, which is the Colposcopy Society, the American Cancer Society and one of the pathology organizations. And the third is the American Congress or College of Obstetricians and Gynecologists which updated their guidelines in 2016. So, where we stood a couple of years ago is that remember that in females that were under 21 years of age, cervical cytology was not recommended, for the most part, the single exception being women who were HIV positive. We'll talk about that in just a moment. For women who were between 21 and 29 years of age, all three groups, recommended screening by cytology only every three years without routine HPV or human papilloma virus testing. For women who were 30 to 65 years of age, you had a choice of either doing co-testing every five years, which is an HPV test, and a cervical cytology, or cytology alone every three years. And as you can see in that column, that all three groups were in agreement about that guideline. For women who are older than 65 years of age, they can exit screening as long as they met a certain criterion and that was referred to as being adequately screened. And that was defined as having three negative cytology tests in the prior 10 years or two negative co-tests, the most recent being within five years, and if those tests had been negative over that five- or 10-year interval then even with new sexual partners women who were 65 or older could stop being screened for cervical cancer. Then very last column is referring to women who had had a complete hysterectomy, whether that be a vaginal or abdominal hysterectomy, assuming that the cervix was removed as well for the nine condition, and those women could exit screening as well.

Dr. Michael Policar:

Now, things started to change a little bit in April of 2014, because the FDA approved a particular test. The first one approved was called the cobas test for screening for cervical cancer using a high-risk HPV test alone. And one of the reasons that the FDA approved this test was based on a very large multicenter trial, which was referred to as the ATHENA trial, which showed that following a particular algorithm, that I'll show you in the next slide, that doing an HPV test alone worked just as well as the other alternatives in screening for cervical cancer, and therefore, the FDA approved this test, and it went onto the market. What they found was that an HPV-alone test was actually more accurate in detecting CIN three lesions or high-grade lesions. But even though there was improved sensitivity, the specificity was not quite as good, and it increased the need for colposcopy. But given the fact that it did have an increased sensitivity, this test came on the market.

Dr. Michael Policar:

Now, just to remind you about how this works, and this is exactly the protocol that was used in the ATHENA trial and then subsequently went into guidelines that were issued by an array of groups in 2015, is that it starts with HPV only screening, that evaluates for 14 different types of HPV. Now, the most likely outcome is the fact that that HPV test for multiple types comes up negative and that should be followed by a routine screening, which was initially defined as screening every three years, but as you'll see in a moment that's now been extended to every five years. And the next possibility is that in screening for the 14 different types of HPV that the test could be positive specifically for HPV 16 or HPV 18, which are the highest risk types of HPV in terms of progression to a CIN three lesion that eventually could become an invasive cervical cancer. And so, women who had a test result on primary HPV screening that was positive for 16 or 18, would go immediately for colposcopy. Now the third arm is that a woman had a positive initial screening test that turned out to be not 16 or 18, which means that it would have been one of 12 other types of high-risk HPV. And in that circumstance, the next step was to do a reflex cytology test, that is to say the liquid-based pap smear or cytology that we're used to doing. If that cytology ended up being intermediate with high-risk positive, one of those 12 other types, and a negative cytology, then follow-up would be done a year later. On the other hand, if that cytology was ASC-US or worse than that woman would triage to colposcopy.

Dr. Michael Policar:

So, basically what the interim guidance said and by the way, all these abbreviations refer to the various groups who signed off on this guidance. SGO is the Society for Gynecologic Oncology. The ASCCP which is the Colposcopy Society. ACOG, the American Cancer Society, and others were all part of developing this initial guideline about management results of primary screening with an HPV test alone. They recommended that if high-risk HPV screening alone was done, that it should not be started before 25 years of age. And if a woman had a negative test result then she should be re-screened routinely, no earlier than every three years. They also pointed out the advantages of going in this direction of primary HPV screening, which is again, there was better sensitivity, or higher pickup rate of pre-invasive lesions than using liquid-based cytology alone. Second was the fact that it would be a less expensive option than co-testing because remember, a co-test is an HPV test and a pap smear. While in this algorithm it's an HPV test only unless there's an initial abnormality. And it was also highly adaptable to the low-resource countries, where there weren't a lot of pathologists or cyto-technicians available, and they

could actually try to make a dent in their cervical cancer rates by starting with a molecular test for the virus rather than with a cytology. But again, you pointed out that a disadvantage was that this approach has less specificity than cytology alone and ultimately, would lead to more colposcopy. Here's the reference for that particular guideline.

Dr. Michael Policar:

So, in 2018, the U.S. Preventive Services Task Force, changed their national recommendations regarding cervical cancer screening, and basically added this option of primary HPV screening alone, although they recommended every five years, or co-testing every five years, or cervical cytology alone every three years. And they gave that a quality A recommendation, meaning that there's very good evidence that the benefits are more than the risks and that any of these three options are considered to be appropriate for women between 30 and 65 years of age. And given the fact there were now three different alternatives, they also recommended that female patients discuss these three options with their clinician so that a woman could decide whether she wanted to be screened with a HPV test by itself, co-testing, or cervical cytology by itself every three years. That was not an entirely realistic recommendation to make, because most practices don't make all three available. They may make one or two of these options available. but not all three. So, you know, rather than telling every woman who is 30 years of age or older that she has these three options, you have to temper that by what you have available in your clinic system. Number two, they said that for women between 21 and 29 years of age that they should continue to have a cytology by itself every three years, again, a quality A recommendation. That for the most part, we should not be doing routine cervical cancer screening for women who are under 21 years of age. And for women who are 65 or older, and who had been adequately screened in the prior 10 years with no history of either treatment, or if they had been treated, no evidence of disease for more than 20 years, that they did not need to be screened either. And by the way, those red D's mean that the evidence of harm exceeds any evidence of benefit and therefore, it's a fairly strong recommendation that we should not be doing the test in the first place. So, it wasn't kind of a wishy-washy let's see, it was a direct view, which said, "Don't screen women who have exited screening because of their age and prior adequate screening or women under 21, for the most part.

Dr. Michael Policar:

So, we'll go back to that original table that I showed you and just point out the fact that only a single cell has changed as a result of these new U.S. Preventive Services Task Force guidelines, and that is for the group of women 30 to 65 years of age who now have three options with the addition of high-risk HPV alone screening every five years. And by the way, one of the reasons we're discussing this is because of the fact that Family PACT has added that option as a benefit. So, your clinic may be doing it already but if not, that is an option which is available to you to make this available and Family PACT will cover it. Now, once these recommendations were made by the U.S. Task Force in 2018, a number of organizations evaluated them, more or less endorsed what the U.S. Task Force had said, but they haven't completely changed their own recommendations yet. So ACOG, American Cancer Society, ASCCP haven't added that to their recommendations yet, they likely will do so over time as they get around to updating their recommendations. Number two, in terms of implications is that over time, we will be doing as a country fewer liquid-based cervical cytology tests as primary HPV screening alone becomes more widely performed for women 30 years of age and less. But as I said earlier, the flip side of that is

that in family planning clinics and OBGYN settings, even in primary care clinics or practices, we will be doing more colposcopies, as we add on high-risk HPV screening alone given the fact that it is less specific. And as we move away from doing cytology alone and more toward doing primary HPV screening, we will see our colpo volume go up. That may be something that you've noticed already. And then finally, health plans might consider limiting the use of co-tests to use only for surveillance after an abnormal cytology or after treatment with a LEEP, or a cryotherapy, or a code biopsy, they haven't done it yet. But at some point, what we may see is that given the fact that primary HPV screening is actually the more sensitive test, it might cost twice as much as doing a co-test, that some health plan at some point they decide to limit the availability of co-testing.

Dr. Michael Policar:

So, Family PACT offers all of those options now which are endorsed by the U.S. Preventive Services Task Force. But you may have noticed that for routine screening, most women are going to be screened every three years or every five years. So, does Family PACT ever cover cervical cancer screening more often than every three or five years? And the answer is they do in certain circumstances. If a woman had a previously abnormal result and is now one of surveillance pathways that where the expectation is an annual screening for a period of time, then of course, they will cover it in that circumstance. Certain examples of that are women who have had a previous cryotherapy, or a LEEP, or a cone biopsy. Initial follow-up is at an interval which might, depending on what the pathology result was and so on, might be the six months, or a one-year interval that would be covered as well. Next is, if you do liquid-based cytology and the result comes back "an insufficiently adequate specimen," or it was "unsatisfactory for evaluation," then that needs to be repeated, usually at about a three-month interval. If a woman had in utero exposure to DES, and there are very few of those women out there now who are under 65 years of age. So, you're not going to really see that very often in family planning. But if you're in a more general GYN practice, and you see women in their late 60s and older, who might still have a reason to be screened, then the recommendation is that DES exposed women in utero should still have annual cervical cancer screening. Next is women who have had HIV infection. These are organ transplant with the use of anti-rejection drugs or long-term corticosteroid use do need to be screened more often in some circumstances. Then a question that suddenly comes up... Oops, not being able to advance here. Hey there we go. Is what about a patient who is new to your practice? She's moved from another state and you ask her the result of her last cervical cytology or her last co-test and she said, "Well, I had that done and I didn't hear anything afterwards, I'm assuming that it was normal," but there's no documentation of that. And let's say it was done a year or two ago, in the city where she originally lived and now, she's living in your city. You might do a baseline screening test in that circumstance because you have no documentation of her recent result. But if that result is negative, then you're going to go back to the intervals that I was mentioning earlier.

Dr. Michael Policar:

Now there are some very specific guidelines about cervical cancer screening for women who are HIV positive, and they are listed for you in the clinical practice alert. So, if a woman is under 21 years of age and is known to be HIV positive, the recommendation is that she has a cytology alone, not an HPV test with it. So not a co-test, not HPV alone, but a cytology alone within one year of starting sexual activity. Or if she is let's say 20 years of age and sexually active now, then you would perform her cervical cytology now. Don't start any later than 21 years of age. And if she's under 21 and has an ASC-US, she

should not go immediately to a colposcopy, she should have a repeat cytology done in six to 12 months, but again, no HPV test because it really doesn't help very much. Next is if a woman whose HIV positive is under 30, and her initial cytology is normal then her next cytology will be in 12 months, and after three consecutive normal annual screenings then her follow-up screening should be done every three years. Now, this is an important change for you to know about because the previous guidelines basically said, for women who are HIV positive, that even if they're being treated, their viral load is undetectable, that they should have cervical cancer screening done annually. This represents a change and it basically says, once a HIV positive woman has had three normal annual screenings, then she could go into a three-year interval after that. And then for women who are 30 or older, you can either use cytology alone or co-testing. And basically, the same rule that if she's had three consecutive annual normal tests, or one negative co-test, then she can go into every three-year follow-up category. And lastly on the topic of cervical cancer screening and HIV positive women, they should not stop at 65 years of age, they should continue having cervical cancer screening throughout their lifetime. And that long reference that you see at the bottom of this slide refers to where this guideline comes from about screening for cervical cancer, a combination of the CDC National Institutes of Health and the Infectious Disease Society of America. So, this has been adopted by ASCCP, ACOG and of course, by Family PACT as well.

Dr. Michael Policar:

Now another circumstance where we may screen more frequently are in women who are immunocompromised. And we do that because while they're not necessarily more likely to acquire HPV infection, when they do, they progress through the stages of dysplasia more rapidly than a person who is immunocompetent. So, in other words, we have to use a shorter screening interval in women who are immunocompromised. Now that's defined as women who have had a major organ transplant, and they use an anti-rejection drug. So, a woman who's had a heart transplant, a kidney transplant, a liver transplant, a lung transplant, virtually all of those people take anti-rejection drugs and that being the case, they should be screened annually. The same is true of women who are long term, high dose steroid users, but that's not true of the immunobiologicals. So, there are lots of new drugs out there used for conditions like psoriasis, or rheumatoid arthritis, Ankylosing Spondylitis and so on. And those do not cause the same degree of immunosuppression. So, the ASCCP guidelines in that point of view say that those women should be screened with the guidelines that we talked about earlier, while women who had a major organ transplant with anti-rejection drugs or long-term corticosteroids use should be screened more frequently. ASCCP recommends that these clients should be screened at the same intervals as HIV positive women. So, what that means is, three annual cervical cytology's in a row, and if they are all three negatives then those women as well can go to three-year screening intervals.

Dr. Michael Policar:

Now other questions that come up are, are screening intervals any shorter for women who have multiple sexual partners. So let's say for example, a woman frequently changes sexual partners or she is a sex worker and has many partners over the course of a year let's say, and the answer is no, females who have multiple sexual partners do have an increased risk for acquiring HPV infection, they are more likely to develop a pre-invasive lesion or a cervical cancer because they're more likely to come in contact with high-risk HPV types, but they don't have faster progression times if a lesion does develop as an immunocompromised woman might. So, the point is, is that we want to, of course, make sure that

women with multiple partners are engaged in screening but we do use the same intervals for them that we would use with other women.

Dr. Michael Policar:

Another question that comes up commonly is do virginal females need to be screened? And unfortunately, the guidelines are not very clear or consistent about that. What an earlier ACOG guideline said is that virginal women of any age should be advised that their risk of cervical cancer is extremely low, but it's not zero. And once counseled a virginal woman can either decline cervical cancer screening and wait until she becomes sexually active, or she can opt to be screened routinely. So, either direction is acceptable in women who have never had penetrative vaginal intercourse.

Dr. Michael Policar:

And just a quick note on something that used to happen years ago, and fortunately I think this doesn't happen much you know, in the last decade, but it's still worth it to mention, and that is, if a woman had an abnormal cytology test or a positive high-risk HPV test, should you do any sort of limitation on her use of hormonal contraception? Should you withhold her pills or patches or a ring? And the answer is that there's no evidence that hormonal contraceptives affect either transit times to a higher-grade lesion, they don't affect treatment outcomes. The U.S. medical eligibility criteria say that using any of the hormonal contraceptives in women who have a pre-invasive lesion is considered to be category two, meaning that she can use a hormonal method, but her follow up may be a little bit more frequent. But Copper IUDs and progestin only pills are considered to be category one. The only ones that are considered to be category four, in other words, something you want to avoid is placing a Copper IUD or a levonorgestrel IUD if a woman's been diagnosed with cervical cancer and she's going to be treated for that either with a radical hysterectomy or radiation therapy. Of course, we wouldn't want to put in an IUD if she is awaiting a treatment which would basically remove any risk of becoming a pregnancy. But for those women who have pre-invasive lesions, it's even more important to provide them with a method of contraception because what we don't want is a person who inappropriately has hormonal contraceptives withheld, and then has an unintended pregnancy which may delay or complicate the treatment for her high rate of lesions.

Dr. Michael Policar:

What if some of your clients insist on annual screening? What do you tell them? Well, basically, what it boils down to is that the way these guidelines were written, is that if you get screened more frequently than you need to it actually does more harm than good. The point is, is that it not only over utilizes resources, but it increases the risk of a false positive which could lead to an unnecessary colposcopy or biopsy or you know, even treatment with all the anxiety and inconvenience that goes along with that. So, we definitely don't want, we really have to explain to patients and educate them that over screening could actually be harmful and that's why we don't do it.

Dr. Michael Policar:

So, what about performing a screening pelvic exam at the time of a well woman visit if a woman doesn't need a cervical cancer screening because she's had the three-year interval or the five-year interval? Well, that's a separate discussion. But basically the U.S. Preventive Services Task Force and others

recommend against routine screening for ovarian cancer by a variety of methods including the pelvic exam in low-risk women. ACOG on the other hand, says that women who are 21 or older should be offered a screening pelvic exam but at the time of a well woman visit in the context of shared decision making, but it's up to her whether or not she actually wants to have that. And certainly, Family PACT standards, do not recommend a screening pelvic examination at any age.

Dr. Michael Policar:

Last couple of things that I want to mention before I hand the microphone over to Nicole is how should any of the follow up visits be coded? And here, of course, we're talking about women who have had an abnormal result, and then they need to come back for more frequent screening. In the Family PACT PPBI, the policies, procedures and billing instructions in family planning related benefits, pages 29 through 31, it lists all of the ICD-10 codes that would be used for one of these follow-up visits. And it's very specific in the PPBI about which code you use, in which circumstance. Be sure to use one of the codes that's included on this list in order to have that claim paid.

Dr. Michael Policar:

Now the last thing that I want to mention is that many of you are used to using the ASCCP guidelines, and probably their mobile app for managing abnormal results of cervical cytology or to help out in making decisions in women who are undergoing colposcopy. The last time that they had been updated was in 2012.

Dr. Michael Policar:

And I've included three slides, although I will not read them, that summarize the management of women who have abnormal results. This is with cytology alone, next is with high-risk HPV alone, and the last is with co-testing.

Dr. Michael Policar:

But what I want to give you a heads up about is that next week ASCCP will be introducing their, "2020 Risk Based Management Consensus Guidelines for "the Management of Abnormal Cervical Cancer Screening Tests" So, these new guidelines focus on finding CIN three lesions rather than earlier lesions. They will integrate a whole new facet of taking into account women's prior results, particularly of an HPV test in terms of determining whether or not they have a persistent HPV infection, which puts you at higher risk if you have multiple tests which show an HPV infection to be present.

Dr. Michael Policar:

They are intended to be more precise and simpler. So instead of all the algorithms that you used to be seeing instead, the risk calculators that ASCCP will be releasing next week, basically will advise women to go into one of six different categories based on the findings of either their cancer screening or their colposcopy. And as you can see, the major categories of surveillance are that either patients will be told to return in five years, or three years, or one year depending on their findings. Then the next category is based on their colposcopy. They may have a follow up that has to do with repeat colposcopy and then the last two are people who have the option of either having a follow up colposcopy or treatment, or people who have a high-risk of CIN three results in which case treatment will be preferred. So, no more

of all the branching logic algorithms instead you'll put in information about the patients result that just happened, the prior result if you know it, and then the app will basically tell you which of these six categories your patient will fall into. So, we're planning on having a whole separate webinar on that, probably in May or June once these guidelines are released, we've had a chance to think about how they'll apply to Family PACT and then we'll have an opportunity for a much more detailed discussion on this topic. Finally, in the clinical practice alert itself, we'll see a number of references. So, with that, I will go ahead and stop and pass the microphone over to Nicole Economou.

Dr. Nicole Economou:

Hi everyone. Thanks for joining today amid all the craziness that's going on. So, today we'll be doing a brief overview of Emergency Contraception or EC. So, we'll be going over some of the different methods, the efficacy, and then reviewing how patients can obtain each method. We'll spend some time examining the data regarding BMI and EC efficacy and when to initiate hormonal contraception after EC, specifically oral contraceptive pills. And then we'll close out by going through some of the common misconceptions around emergency contraception. Throughout the talk there will be some quiz questions for you to answer using the polling feature through the webinar. And this is just to get you thinking a little bit more about the material. So, we'll start with the first quiz question and you'll have 30 seconds to answer each question.

Dr. Nicole Economou:

Which is the most effective method of Emergency Contraception? And you'll select from the following, Ulipristal or Ella, the Copper IUD, Oral Levonorgestrel which is also known as Plan B, combined Oral Contraceptive Pills or the Levonorgestrel IUD. So, we'll let everyone finish up putting their answers in. Alright, Nicole, are you able to show the results of the poll?

Dr. Nicole Economou:

Let's see. So, 63% selected the correct answer, which is the Copper IUD. The second most selected answer was Oral Levonorgestrel or Plan B. So, in the next section, we'll go over a little bit more about the efficacy rates, why the Copper IUD is the most effective, and then we'll talk a little bit about the efficacy of the oral emergency contraceptive pills as well.

Dr. Nicole Economou:

I usually like to start off by just giving a little bit of history and background about emergency contraception. So hormonal postcoital contraception dates back to the mid-1960s when a Dutch family physician provided high dose estrogens to a patient. In 1984, the United Kingdom actually became the first country to approve a product specifically packaged as emergency contraception. More than a decade later, the FDA in the U.S. approved a dedicated product for emergency contraception. Today, emergency contraception is available in 140 countries and is over the counter in 60 of those countries. The first described method in the U.S. was the Yuzpe method, which is a combined oral contraceptive method. And in 1998, Preven was a combination of this method that consisted of progestin and ethinyl estradiol. Preven was subsequently removed from the market in 1999, because levonorgestrel products were more effective with less side effects. The Copper IUD was first described in the literature for use for emergency contraception in the 70s in 1976. And then you can see that the FDA has been approving

oral regimens in the late 90s and 2000s. The methods of emergency contraception used in the U.S. are the Copper IUD and oral emergency contraceptive pills which are levonorgestrel, also known as Plan B, and ulipristal acetate, which the brand name is Ella.

Dr. Nicole Economou:

So, the Paragard or Copper IUD was approved by the FDA, the current one that we use in 1984. And it has been sold and used in the United States since 1988. It can be used for emergency contraception up to 120 hours or five days after unprotected intercourse and it has a very high efficacy. The pregnancy rate is 0.1% or one in a 1000. It also provides long-acting reversible contraception. There was a study in 2010 looking at women who used the Copper IUD for both emergency contraception and continued it for contraception. 94% of multiparous women and 88% of nulliparous women maintained the IUD for contraception. Keep in mind that Family PACT will cover the Copper IUD for emergency contraception if the patient also intends to use and maintain this method as her long-term method of contraception. So, patients should be counseled about the benefits of a long-acting reversible contraceptive method in general. And if the patient feels that the Copper IUD is a good fit for ongoing contraception and also requires emergency contraception at that visit, she would be a good candidate for Copper IUD placement both for emergency contraception and then ongoing contraception.

Dr. Nicole Economou:

Oral levonorgestrel or Plan B is the most commonly used form of emergency contraception in the United States. It is available over the counter without age restriction and there are no contraindications to its use. It's available in a single oral 1.5 milligram dose. The way that it works is that it inhibits the LH or luteinizing hormone surge and thereby prevents ovulation. It is ineffective if the surge has already occurred. Plan B is currently labeled for use up to 72 hours after unprotected intercourse. There is some evidence that it may be effective up to four to five days after unprotected intercourse, though this is less. The efficacy also decreases with obesity. So, BMI's over 30. We'll talk about this a little bit later on in the talk.

Dr. Nicole Economou:

The pregnancy rate for Plan B is 1.4% to 2.6% depending on which study that you look at. Throughout all the large trials that have been evaluated for efficacy of Plan B, the upper limit of pregnancy rates is about 2.6%. Though this increases with increasing BMI and also time from unprotected intercourse, so this is kind of a conglomerate of all the available research and data that we have. Plan B is labeled as contraindicated for pregnant women, not because it incurs risk to the fetus, but because it is ineffective after implantation. So, you may see this on the label that pregnant women should not use Plan B, but it's only because it's ineffective. There are no adverse effects on the fetus or pregnancy course as seen in several studies and we'll go through this as well.

Dr. Nicole Economou:

Ulipristal acetate, also known as Ella, is the newest oral pill for emergency contraception that is available. It is given in a single 30 milligram dose. It is an antiprogestin, so it prevents ovulation by delaying the follicular rupture before and after the LH surge has started, but before it peaks. It's labeled for use up to 120 hours or five days after unprotected intercourse. Similar to the Copper IUD. In large

prospective studies of ulipristal, it is the most effective oral emergency contraceptive method and single cycle pregnancy rates have been reported of 1.2 to 1.8% in the largest studies, though some studies also report a lower pregnancy rate. It does require a prescription for use unlike Plan B, which is over the counter.

Dr. Nicole Economou:

Lastly, but probably most interesting is a comparison between the efficacy of ulipristal and levonorgestrel for emergency contraception. This data is a little bit older but in 2006, Dr. Crenin published the results of a non-inferiority study that focused on ulipristal versus levonorgestrel, within the first three days, so 72 hours after unprotected intercourse. This study found a lower pregnancy rate in the ulipristal group. The difference wasn't statistically significant, but the study wasn't powered to demonstrate a superiority. So, they only wanted to show that ulipristal was at least as effective as levonorgestrel. In 2010 another study found a statistically significant decrease in pregnancy rates among women in the ulipristal group compared to levonorgestrel if taken between 72 to 120 hours after unprotected intercourse. So, this is between, it's in that four to five days after unprotected intercourse group. This data isn't shown but in that sub-analysis women that took ulipristal four to five days after unprotected intercourse had no pregnancies, where there were three pregnancies in the levonorgestrel group. So, this was a statistically significant difference. This publication also went on to do a meta-analysis with the prior study by Dr. Crenin. And those are the bottom three orange rows, they broke down the time periods into zero to 24 hours, zero to 72 hours, and zero to 120 hours after unprotected intercourse. And this meta-analysis show that at all time points ulipristal had a statistically significant lower pregnancy rate. So, this has shown that ulipristal acetate is more effective than levonorgestrel for pregnancy prevention when used for emergency contraception.

Dr. Nicole Economou:

To put it a different way using this data when patients use ulipristal versus levonorgestrel within 72 hours after unprotected intercourse they have a lower pregnancy rate. If they take it within 24 hours, they have 2/3 the risk of becoming pregnant, if they take ulipristal compared to levonorgestrel and within 120 hours, so that five-day window, they have half the risk of becoming pregnant taking ulipristal compared to levonorgestrel. We think that ulipristal is more effective than levonorgestrel because it is likely more effective in preventing ovulation of larger follicles. So that's one potential reason why it may be a little bit more effective for women that are seeking emergency contraception.

Dr. Nicole Economou:

To summarize, there's a great table in an ACOG practice bulletin that goes through all the different methods of emergency contraception, the timing of use and the access. So, this is a really good quick reference for anyone that wants to refer back to this after the talk.

Dr. Nicole Economou:

So, in patients that are asking how they can obtain emergency contraception, levonorgestrel or Plan B is available over the counter without an age restriction. Just because it's available over the counter doesn't mean that you can't get it without a prescription. So, if a clinician wants to prescribe this, patients can get this through their insurance and it sometimes is cheaper. Ulipristal or Ella does require a prescription

for women to get this at the pharmacy. There again is no age restriction. In California trained pharmacists can prescribe oral emergency contraception, though this is limited because of barriers to widespread implementation and use, and it's limited by the availability of ulipristal in community pharmacies. But either way women should have access to both of these in the pharmacy. A Copper IUD as you know, requires insertion by a trained clinician, and it is covered by Family PACT if the patient intends to use it as a long-term contraceptive method.

Dr. Nicole Economou:

So, let's transition to discussing BMI and efficacy of emergency contraception. This is a study, most of this data is from a study by Dr. Kapp in 2015. For women with normal BMI's, so BMI's between about 18 and 25 ulipristal seems to have about the same efficacy as levonorgestrel when just looking across categories of BMI. For women that are overweight, so BMIs between 25 and 29.9, ulipristal does seem to be more effective than levonorgestrel. And for women that are obese, there is a really large difference. So, for anyone with the BMI over 30, ulipristal is much more efficacious than levonorgestrel. And just as a reminder, the Copper IUD, the efficacy is not influenced by weight. So that doesn't have any influence in terms of BMI, but the oral emergency contraceptive methods do. And obese and extremely obese women, we think are exposed to lower total and bioavailable levonorgestrel than normal BMI women and this is seen more so than with ulipristal. So, this lower bioavailable levonorgestrel might play a role in the reduced efficacy of levonorgestrel emergency contraception in these patients.

Dr. Nicole Economou:

So, if a patient comes in and asks for emergency contraception, they should be counseled, of course about all methods. And if they're wanting an oral method, it's really important to take a look at their BMI. So, for women with a BMI under 25, so normal weight, both oral emergency contraceptive options are acceptable to them. Obviously, timing from their last unprotected intercourse is something that's really important to consider when counseling on methods. For women that are overweight, levonorgestrel does tend to be a little bit less effective. For women that are obese, so BMI between 30 and 34, so class one obesity, the failure rate of levonorgestrel is four times higher than ulipristal, and really, the rates of failure are about the same as the rates of pregnancy if you're not using emergency contraception. So, women should really be counseled about ulipristal as a better option for them. And for patients with BMI's over 35, it's a little bit unclear, it's possible that ulipristal might be ineffective, but it's better to use that then levonorgestrel if the patient does not want a Copper IUD. So, it's really important to counsel them not only based on the timing of her last unprotected intercourse, but just based on BMI what the efficacy is.

Dr. Nicole Economou:

Another big topic is when to start contraception after EC is used. So, for women that are taking levonorgestrel or Plan B emergency contraception, they can resume or restart any contraceptive method almost immediately. Once they do start it, they should use a barrier method for seven days after the start. So, if women are taking the pill and they want to continue, they can continue immediately after taking levonorgestrel. If they're getting the implant the same day as Plan B, that's also fine to do as well.

Dr. Nicole Economou:

When to restart hormonal contraception is a little bit trickier when talking about ulipristal. The concern is that since ulipristal is an anti-progestin following it up quickly with hormonal contraception that contains a progestin could kind of cancel out the effects to inhibit ovulation. So, the FDA changed to the ulipristal acetate label in 2015 stated that, "Women should wait about "five days after taking ulipristal "until starting a hormonal contraceptive method "and use a barrier method in the interim." And this really is most shown in a study from 2018 by Dr. Edelman at OHSU. This was a prospective cohort study with 36 women. And the aim was to determine if starting combined oral contraceptive pills shortly after ulipristal acetate interfered with the mechanism of action. And in this study, they used a combined oral contraceptive pill. So, this is the only real data that we have about this. But participants received ulipristal for two cycles, and then we're followed for seven days with ultrasounds, blood sampling for progesterone and LH. During one of those cycles, they started the oral contraceptive pill two days after they were given ulipristal. And they found that in the cycle, when the oral contraceptives were started, more women showed evidence of follicular rupture in less than five days, and this includes women who also experienced follicular rupture prior to initiating COC's, so that was one patient in this study. So, they found with this limited data, it was a small sample, but the efficacy of ulipristal was significantly reduced with early exposure to combined oral contraceptive pills. So, it is really important to counsel patients that if they do if they do become pregnant while they're on an oral contraceptive pill, and they want to restart it after they take ulipristal they should wait at least five days before restarting their method.

Dr. Nicole Economou:

So, this is a summary for counseling women regarding restarting contraception after oral EC. And you can see for anyone that wants to restart an oral contraceptive method, a patch or ring after taking ulipristal, they should start five days after unprotected intercourse.

Dr. Nicole Economou:

Things that we don't know so far is that if we quick start other methods like the levonorgestrel IUD, the implant, the Depo-Provera, basically anything other than these user-controlled methods will this affect the efficacy of ulipristal? Most likely it will. But you also have to weigh the potential loss of the ulipristal acetate efficacy versus starting another ongoing, highly effective method, barriers to patients in coming back to obtain that method that isn't user controlled. So, we don't have a lot of really good data about this. But it is important to counsel women that do want to start another contraceptive method and are taking ulipristal about the possible reduced efficacy, and then weigh their risks and benefits of starting a method immediately.

Dr. Nicole Economou:

So, let's close out our discussion, going through some common misconceptions surrounding emergency contraception. And we can start our last quiz at this point, Nicole, if you want to bring that up. So, a 31-year-old G2 P2 had unprotected intercourse four days ago. She comes in seeking emergency contraception. She is a smoker, has hypertension, and her BMI is 35. She declines a Copper IUD. She used it in the past and it caused her to have very heavy menses. Her next best option for emergency contraception is, is it the oral levonorgestrel, Plan B. ulipristal or Ella, oral contraceptive pills, or a levonorgestrel IUD? I'll give people some time to go through this. All right, we'll have people get their

answers in and then close out the quiz. All right, so 81% of people said, oral ulipristal which is correct. And the biggest reason for this is her BMI and the fact that she had unprotected intercourse four days ago. So, Plan B is labeled for use up to 72 hours after unprotected intercourse. It is possible that it's efficacious after that, but Ella, or ulipristal is a better option with a BMI of 35. It is also possible that the ulipristal has a slightly decreased efficacy for her, but it's much, much more efficacious then Plan B. The levonorgestrel IUD has actually not been studied for emergency contraception. So, it's therefore not currently recommended. Those studies are underway.

Dr. Nicole Economou:

All right, so the first common misconception is the effects on pregnancy. So, some people worry that Plan B can have a negative effect on a pregnancy if a pregnancy were to continue. But in a study of 332 pregnancies where levonorgestrel emergency contraception was used in the conception cycle there was no increased risk of birth defects. And this makes sense since EC is taken before organogenesis. So, there's no effects on the developing embryo that have ever been shown. And emergency contraception does not increase rates of ectopic pregnancy. In fact, like other contraceptives it reduces the absolute risk of ectopic pregnancy by just preventing pregnancy in general.

Dr. Nicole Economou:

There are also some misconceptions surrounding the mechanism of action. So, some people confuse Plan B with mifepristone, which is used for medication abortions. According to many different societies, including the NIH and the FDA, pregnancy begins after a fertilized egg implants in the lining of the uterus. And oral EC does not affect this. The primary mechanism of action is to inhibit or delay ovulation. The Copper IUD can potentially prevent implantation, but the Copper IUD does not disrupt implantation. The primary mechanism of action of the Copper IUD is to prevent fertilization through the effect of the copper ions on sperm function and it can potentially prevent endometrial receptivity. So, there is some evidence that it potentially may prevent implantation, but it does not disrupt implantation once it actually occurs.

Dr. Nicole Economou:

A third misconception is that women with medical conditions or who are breastfeeding are not eligible to use emergency contraception. The WHO Medical Eligibility Criteria and the U.S. Medical Eligibility Criteria states that there is no condition where levonorgestrel emergency contraception is contraindicated. The only caveat being if a woman is known to be pregnant, inserting an IUD is MEC class four, the only labeled contraindication for oral emergency contraception is pregnancy only because as we discussed before, it won't work, not because of any adverse effects. So, women with contraindications to combined oral contraceptive methods like liver disease, migraines should still be offered oral emergency contraception. In breastfeeding women, breastfeeding is not recommended for 24 hours after taking ulipristal because it is excreted in the breast milk. The highest concentration is in the first 24 hours and the maximum maternal serum levels are reached one to three hours after taking this. The mean ulipristal concentrations in breast milk decrease from zero to 24 hours and then slowly decrease over five days. So, it is recommended that women pump and dump for 24 hours after using ulipristal. Women that are using levonorgestrel oral emergency contraception should be fine to

breastfeed. And it is MEC category one for breastfeeding in women that want to take an oral emergency contraceptive method.

Dr. Nicole Economou:

The last misconception is that easy access to emergency contraception will lead to repeat use which may be harmful. Studies have shown that repeat use is uncommon, but it is safe to do. According to a study done by the National Survey of Family Growth 61% of emergency contraception users have only used emergency contraception once. Even so, repeated use is still safe and should still be offered to women. Repeated EC use is category one in the U.S. Medical Eligibility Criteria for all of the methods. And then the WHO guidelines on emergency contraception, they state that, "Although frequent use "of emergency contraceptive pills is not recommended, "repeat use does not pose any health risks "and health risks should never be cited "as a reason for denying women access to treatment."

Dr. Nicole Economou:

So, to end I just want to review a few important resources for providers and patients. The first is a website operated by the Office of Population Research at Princeton which is not-2-late.com. It has no connection with any pharmaceutical company or any for profit organizations, it is a peer reviewed resource. It's good for both patients and providers with a lot of information about what are the emergency contraceptive methods, how do they work and how to obtain it. The information is available in English, Spanish, French and Arabic. Some of the information can be a little bit dense, but it's a good resource for providers as well. Bedsider.org has a great easy to read chart outlining all of the different methods. It also links to the not-2-late website, it's both .org and .com, both of the websites will link to the same resource. So, this might be a good thing to share with patients if they're deciding on a method for them.

Dr. Nicole Economou:

So, to summarize, emergency contraceptives are time sensitive, they're more effective the sooner that their given after unprotected intercourse. The Copper IUD is the most effective method of emergency contraception and it is not influenced by weight. Placement can be offered up to five days after unprotected intercourse and is covered by Family PACT if a patient intends to use it as a long-term contraceptive method. So, in this way it's double duty. It provides long term highly effective contraception in addition to emergency contraception. For oral emergency contraception, up to 72 hours after unprotected intercourse overall ulipristal and levonorgestrel have similar efficacy across the board. But between 72 and 120 hours after unprotected intercourse ulipristal is much more effective than levonorgestrel when just looking at timing. And lastly BMI does affect the efficacy of oral emergency contraceptives. Levonorgestrel is less effective in women who are overweight, and it has little effect in preventing pregnancy for those who are obese or have BMI's over 30. Ulipristal is effective in overweight females but slightly less effective in obese women. Thank you for your attention. I'm happy to answer any questions. My email is also listed here, and you can feel free to reach out to me with any questions as well.

Renyea Colvin:

Okay, we do have several questions in the queue here. The first question is for Dr. Policar. And the question is, "Can you talk about Family PACT "covering Plan B versus Ella in pharmacies?"

Dr. Michael Policar:

"I was sent a prescription "to an outside pharmacy, will Family PACT cover the cost "of the emergency contraception at the pharmacy?" So, the answer is yes. Family PACT covers the dispensing of emergency contraceptive pills, either when they're dispensed in the clinic, or if they are dispensed in a pharmacy. So, the thing about the pharmacy to remember is that a person just can't walk into a pharmacy get Plan B or the generic version of Plan B, and then expect Family PACT to pay for it. In other words, in order for Family PACT to pay for it in a pharmacy, there has to be transmission of a prescription for the patient that goes from the Family PACT delivery site, your clinic or your private practice, your FQHC sent to the pharmacy and then the pharmacy will fill the prescription either for, more likely the generic version of Plan B that is to say, the levonorgestrel emergency contraception or for ulipristal acetate, which is Ella. And as Dr. Economou mentioned, basically, with Ella you always have to have a prescription with levonorgestrel one doesn't in order to be able to buy it, but in order for Family PACT to pay for it, you have to have a prescription in either circumstance. So, basically the answers to both questions is, yes Family PACT will cover it in a pharmacy, they cover both types, but it does take a prescription in order to have that done.

Dr. Michael Policar:

Now another question that just came in that is similar, "Can a pharmacist at a pharmacy like Target "see an established Family PACT patient "and prescribe on site?" And the answer to that, at least at this point is no. Now in general, they can. Of course, pharmacists, as Dr. Economou mentioned are permitted in California to be able to take a history from a patient, and, in fact, for the most part, the pharmacist doesn't even need to for levonorgestrel pills, you know, there's not even a history involved. A person can just go ahead and buy it. But the point is, is that a person can go to a pharmacist, have Ella prescribed by a pharmacist. But the thing is, is that Family PACT doesn't cover that because at least for now, pharmacists are not Family PACT providers. So, in order to be registered as a Family PACT provider, you basically need to be either a clinic, or a private practice that is enrolled in Medi-Cal, and then once you become a Medi-Cal enrolled provider then a separate process you can become a Family PACT provider and then you can do prescriptions for either the emergency contraceptive pill products that will be covered. But at least for now, within Family PACT pharmacists are not considered to be Family PACT providers. So that's where we stand with that. While we're waiting for more questions--

Renyea Colvin:

All right.

Dr. Michael Policar:

While we're waiting for more questions to come in, I'm going to mention one other thing really quickly that I did not cover in my talk because it's a late breaker. This was on... And by the way, we're switching back over to cervical cancer screening for just a moment while we wait for other questions to come in. And this came from ASCCP, the American Society for Colposcopy and Cervical Pathology, it was issued

on March 19. So, it's only about four or five days old, basically. But it is entitled, "ASCCP Interim Guidance "for Timing of Diagnostic and Treatment Procedures "for Patients who Have Abnormal Cervical Screening Results." Okay, and I will quote it directly and then we will be sure to put this into the Q&A that will go online as well. So, it says, "In light of the current unprecedented "COVID-19 pandemic, and in settings where all "non-essential medical office visits "and elective procedures have been suspended, "ASCCP recommends the following: "Number one, individuals with low-grade "cervical cancer screening tests may have postponement "of diagnostic evaluations for up to six to 12 months." So, number one, they're saying, patient comes back with a low sill for example on her cervical cytology, normally that might trigger notifying the patient, getting her in for a colposcopy fairly quickly. What they're saying is, is that in the case of low-grade cervical cancer screening test results you can postpone that up to six to 12 months. Just given the fact that, you know, that we don't want the patient to... Well, there's a whole variety of reasons why we're trying to avoid people coming into medical offices during this period. "Number two, individuals with high-grade "cervical cancer screening tests should have "documented attempts to contact the patient "and diagnostic evaluation scheduled within three months." So, someone comes back with high sill on cytology rather than trying to get her in very quickly what they say is, try to do that within three months. The next one says, "Individuals with high-grade "cervical cytology without suspected invasive disease "should have documented attempts to contact her "and get her procedure scheduled," in other words her LEEP, her cone biopsy, vary rarely that might even be a cryotherapy, "within three months." And then the last part of it says, "Women with suspected invasive disease "should have contact attempted within two weeks "and evaluation within two weeks of that contact." In other words, four weeks from the time of the initial report or the initial referral. And then they have some additional verbiage below it which basically says, "They're not definitive management guidelines. "They're just intended to answer, "the kinds of questions that are coming into ASCCP."

Dr. Michael Policar:

So, if you want more information about that go to ASCCP.org, you don't have to be a member in order to be able to get those recommendations in writing. But just given the extraordinary circumstances right now with COVID-19 and trying to avoid office visits for conditions which are considered to be or categorized as being "non-essential." this actually gives you some guidelines about what acceptable time intervals would be in regard to the postponement of a visit. And then the other reason to stay sort of in touch with that ASCCP.org website is that, you know, the National ASCCP convention was supposed to happen next week in Orlando, Florida where all these new management guidelines were supposed to be explained, a week and two days from now, but that was actually, that meeting was canceled and was converted into an online meeting. But nonetheless, you should see things on both the ASCCP website as well as their journal and other OBGYN journals about their new guidelines, probably within the next two weeks or so. So, like I said, Family PACT will respond to those new management guidelines. Expect to see a webinar in the next few months. Okay, So enough about that.

Dr. Michael Policar:

Let's go back to the questions. "So, pharmacists are now enrolling as Medi-Cal providers. "How can we extend this to Family PACT?" The best way to do really is to request that at the Office of Family Planning. And my guess is that something which has, it either is under consideration or has been under consideration. And you know, I'm going to say as a generality Family PACT has a tendency to follow most Medi-Cal policies, particularly when it comes to personnel. Occasionally they actually get ahead of the

Medi-Cal policies. Sometimes there'll be a delay and then they'll follow Medi-Cal policy. So, given the fact that this is now something that is acceptable within Medi-Cal, I'm sure it's something that will be considered within the Office of Family Planning, if it hasn't already.

Dr. Michael Policar:

Okay, next question. "Since the risk of cervical cancer in a virginal woman "is not zero, is the etiology still assumed to be HPV? "And how would she have obtained HPV?" So, there's actually a very interesting historical footnote to that, and that is that going all the way back to the 1500s, it was noted that in religious institutions where it was exclusively females, like what they used to call a nunnery basically, where it was all women who were living in a religious environment with no males around, that cervical cancer was actually very rare in that circumstance but wasn't zero. So, the question that's being asked is, "How does that virginal woman acquire HPV?" And the answer is that we still assume that the vast majority of cases of cervical cancer are due to HPV. There is a very rare type of HPV, which is actually... I'm sorry, rare type of cervical cancer, which is not HPV related. It's a different kind of neuro-endocrine tumor that can develop on the cervix, which is not related to HPV, but that's extremely rare. So, it may have been vulva to vulva contact, it may have been contact with fingers of a partner. So, we think that those are not efficient ways of transmitting HPV. But the reality is, is that it doesn't necessarily have to be penile to cervical transmission of HPV. That there are other types of direct contact of HPV with the vagina or with the cervix that might have to do with non-penetrative sexual contact that would lead to the possibility of HPV infection. So, given the rare non-HPV cancer and then the rare possibility of transmission by something other than penile-vaginal contact that's why it's not zero. But it's still extremely unusual.

Dr. Michael Policar:

Okay, next question is, "To clarify if we send "a prescription..." Let's unlock that. Here we go. "If we send a prescription to a pharmacy "for EC, Family PACT will cover it?" I'm sorry, it sounded like a yes at first but no at the end. No, it was intended, absolutely to be a yes. I'm sorry for any confusion. If you send a prescription to a pharmacy for emergency contraception, either type, and it's for an enrolled Family PACT patient, then that prescription will be covered by Family PACT. Okay, that one's definite. That one's for sure.

Dr. Michael Policar:

All right, next question is, "Sorry if I missed this, but with the liquid-based pap test, "is it still contraindicated to do "the pap during the menstrual period "or during a workup of abnormal uterine bleeding?" So, the answer is, is that you can basically do a liquid-based cytology more or less any time you want too. Now, if a person's having heavy menstrual bleeding, like the first day of her menstrual period, that still makes it a little bit more difficult for the cytology lab to get this right. But the way that liquid-based cytology is done is it's actually a process which strips out the red blood cells and the white blood cells from the sample which ultimately is evaluated either by a computer or under a microscope, or both. So, liquid-based cytology is far more forgiving of blood than the old glass pap smears were, where if there was a lot of blood, the cytologist's just couldn't read it. And the point is, if they can read it with blood in liquid-based cytology, but if the bleeding is quite heavy, it still makes it difficult for the pathologist to be able to read it. So typically, what the recommendation is that if a woman is on

anything other than the first day of her menstrual period, then it's worth it to send in a liquid-based cytology. In fact, if it's a person who doesn't come in very often, and you're just using this opportunity to do liquid-based cytology because, she doesn't commit the screening test very often, it's still best to go ahead and send it because if there's too much blood the cytologist's will tell you that, that they can't read it and they will just call it unsatisfactory reading. But in the large majority of circumstances, even though the woman is having her menstrual period, the process will strip out red blood cells, it will be readable, and you will be able to get a result of that. So, what I'm trying to say here is that anything other than the first day of the menstrual period, I would go ahead and take the sample. And if it's a person where you're afraid they might not come back, go ahead and do it even on the first day of their menstrual period.

Dr. Michael Policar:

Okay, next question is, "Can we do telemedicine and prescribe "emergency contraceptive pills?" And the answer to that is yes. So, it's important for you to know because I don't think it is widely known at this point that Family PACT does cover synchronous telehealth or telemedicine visits in a way that's consistent with the Medi-Cal policy on this. So, not to do a little talk on telemedicine but remember there are like three or four different categories of telemedicine. One is synchronous, which then there is an audio and visual hook-up, basically between a patient and a provider. So that's when basically it's a HIPAA protected platform, you can see the patient's face, have a conversation with her, and you're a provider at a remote site. In that circumstance, you can bill Family PACT or Medi-Cal for that visit, use a standard E&M code but you have to use a specific two-digit modifier on the end of that E&M code, and I'm sorry, I don't remember that off the top of my head. But that is covered if it's synchronous. On the other hand, asynchronous visits, at least as of the most recent PPBI are not covered. So, asynchronous means that basically, information is sent to the provider, the provider evaluates that at a later time period, and then based on that information then makes a decision about whether to prescribe a method for a patient and that prescription may be sent in. Okay, and that's how a lot of the telehealth companies do it through apps where patients fill out information about herself, then a clinician looks at that a few hours later, makes a decision, and then they prescribe a particular method. So those types of basic visits are not covered in Medi-Cal or Family PACT now. Now, certainly that may change you know, given what's going on with sheltering in place and non-essential visits being not recommended at clinics. So that the definition of a telehealth visit may be expanded by Medi-Cal. I don't think that's happened yet. But at least in terms of the policies that existed, maybe until, you know, a few days ago. The point is, is that in a synchronous telehealth visit, if you're set up for that in your clinic, then prescribing emergency contraception is one of the things, both for the visit for the E&M code for the visit, and then the prescription that's transmitted would be covered by Family PACT in that circumstance. And the codes are really no different. It's the same E&M code when it comes to the dispensing of the emergency contraceptive method. It's the same hick pick code. The only thing that's different is that if it's a televisit, it has that two-digit modifier that comes after the E&M code.

Renyea Colvin:

All right it looks like--

Dr. Nicole Economou:

Doctor, we have a...

Dr. Nicole Economou:

I have a few questions in my queue so I can start answering some of them.

Dr. Michael Policar:

Go ahead, please.

Dr. Nicole Economou:

A few questions about, restarting contraception after taking specifically ulipristal, just to clarify. So, if a patient takes Plan B, they can restart any contraceptive method immediately. If a patient takes Ella or ulipristal, they should wait five days before beginning an oral contraceptive method, a combined method, or a progestin only method. So, five days after taking Ella. I just wanted to clarify that. There were a few questions about weight cut offs, and not just BMI cutoffs. So, it's similar in terms of efficacy when you're looking at weight versus BMI. Most of the large multicenter or meta-analyses looked at BMI when they looked at their data. So that's why I tend to use BMI. But in terms of weight cut offs, if we're just talking in pounds or kilograms for levonorgestrel or Plan B, over 80 kilograms, which is 176 pounds. So, 176 pounds or over the failure rate is about 6%, which is similar to the rate if not using emergency contraception. So, it's usually not effective for weights over 175 pounds. And then for ulipristal, there's an increased failure rate and a decreased efficacy for weights over 88 kilograms, which is 194 pounds. So, I like the BMI cutoffs because it's a little bit easier to remember. But you can also use the weight cut offs as well. It's just that when looking at most of the data, they used BMI to look at the failure rates and the efficacy rates. There were also a few questions about studies regarding doubling the dose of levonorgestrel EC for women with a higher BMI. As far as I know, most of the data regarding the doubling of the dose to a three-milligram dose instead of a single 1.5 milligram dose is only kind of pharmacokinetic studies showing that there is a higher bioavailability of levonorgestrel in women that took a three milligram versus a 1.5 milligram dose. These were really small studies, and I don't think that this has been demonstrated in terms of a decreased failure rates when using it in the general population for EC. Dr. Policar, I don't know if you have more regarding that?

Dr. Michael Policar:

Yeah, number one, I am familiar with the study that you're talking about. Allison Edelman and her group up at Oregon Health Sciences University did that, showing that there are higher blood levels of levonorgestrel if you double the dose. And they are doing a study right now, that looks at failure rate. But they're not nearly done with the enrollment of that. We don't have any idea of what the outcome of that is going to be. So, I'm kind of with you in terms of what you just said, about the fact that it's really not ready for primetime. I know that there are a few clinicians who are actually doing it just based on the pharmacokinetics that you mentioned, but you know, in my opinion I really am waiting until we get the result of an actual study that looks at failure rate and pregnancy rate in the context of doubling the dose. I don't think it's fair to patients to give them hope that, you know, with a very high BMI, it's going to be more effective until we actually see a study which demonstrates that.

Dr. Nicole Economou:

Correct. And I think counseling women toward Ella in that case, depending on what their BMI is would be a better option. Obviously, that's also limited because pharmacies, I've been noticing don't always carry Ella but for the most part they should. So, I think it is a good idea to counsel them a little bit more toward ulipristal rather than just doubling the dose of levonorgestrel if possible. There were several questions--

Dr. Michael Policar:

Agreed.

Dr. Nicole Economou:

About patients having more than one episode of unprotected intercourse, especially after taking oral emergency contraception and when to re-dose. So, for Plan B, levonorgestrel, the half-life is about 24 hours and similar for ulipristal, as we saw from the breastfeeding data, the rates really decrease between 24 to 48 hours and then after 48 hours. So, if a patient has an episode of unprotected intercourse three days after Plan B, they should be re-dosed. I think that the question becomes if they took Plan B, let's say they just got it over the counter, their BMI is in the obese or overweight category, should you consider giving them Ella? I think that depends on the timing of when they took the Plan B, because you're using then an anti-progestin when they've just taken a progestin. So, I think that becomes a little bit more of a nuanced conversation in terms of exact timing for when she took it, but I think overall giving oral emergency contraception multiple times in the same cycle would be okay, depending on the last time that she took it. The whole goal with the oral emergency contraception is to delay or inhibit ovulation. So, if they are still at risk of ovulating in that cycle and they have multiple episodes of unprotected intercourse, they should receive another dose of oral emergency contraception.

Dr. Michael Policar:

Agreed.

Dr. Nicole Economou:

I'm looking through some of the other questions. So, suggesting IUD as an option for a patient for emergency contraception, who has a BMI of 35 if they're between 72 and 120 hours after unprotected intercourse and how to counsel a patient about the IUD as an option. I think you do it like your normal counseling for both contraceptive methods and then emergency contraceptive methods and going through each of the different methods and their efficacy. And I think highlighting that the oral methods for someone with a BMI of 35 or older are going to be less efficacious than in a Copper IUD. The big thing to keep in mind is really their goals for contraception, if they think an IUD is even an acceptable method of contraception to them, and then what their menstrual history is. Because if it's someone that has a lot of unexplained abnormal bleeding, really heavy menses, painful menses, the Copper IUD may not be a good method for them. And although it is more efficacious for emergency contraception, if she doesn't think it's acceptable for her to use as a baseline method of contraception, it shouldn't be used

for her. So, kind of counseling them toward what their long-term goals are, if they would have found it acceptable, I think is the most helpful thing when you're introducing the IUD as an option. And someone asked if "Five days is the absolute "outer limit for Copper IUD placement "for emergency contraception?" So, the Copper IUD is likely effective longer out from unprotected intercourse, though the studies just are not there yet. I believe that there are some people, I think Dave Turok in Utah is doing a study looking at extended use of the Copper IUD for emergency contraception up to, I can't remember exactly, like a week or a week and a half after unprotected intercourse, but I don't think we have the data right now to suggest that it's effective. So, at this point, up to 120 hours would be the recommended limit to use a Copper IUD for emergency contraception. Someone asked if, "Family PACT has considered allowing "male patients to have emergency contraception covered." I'm assuming if they were picking up for a partner. Dr. Policar, I don't know if you have any insight into coverage for what specific patients?

Dr. Michael Policar:

Only the fact that what you just mentioned is accurate. That it is considered to be a benefit for females at this point and not for males to be able to get it in their name with the intention of giving it to a female partner. Now, of course if the prescription is for a female partner, the person's partner can typically go to the pharmacy and pick it up on her behalf. That's not an issue, but the prescription has to be written for a person who's identified in the Family PACT system as being a female.

Dr. Nicole Economou:

Okay, that's helpful. Someone asked about just accessibility of oral EC over the counter. So...

Dr. Michael Policar:

Can I just go back though and just add one thing? I'm sorry. Only because I want to make sure it's very clear, you probably said it, but when we talk about levonorgestrel emergency contraception being purchased over the counter, and here I'm not talking about Family PACT. I'm just talking about it in general. Absolutely males can purchase it. So, in other words, outside of Family PACT, if a person wants to go to a pharmacy and buy a pack of levonorgestrel emergency contraception and pay for it, the 30 or $40, whatever the pharmacy is charging for that. A male can absolutely do that. Just not by prescription in Family PACT. Excuse me for interrupting you.

Dr. Nicole Economou:

No, it's a good point. Someone also asked about eligibility over the counter in terms of age restrictions in Nevada. I'm not familiar with the restrictions in Nevada. I know that in California, there is no age restriction to getting levonorgestrel over the counter without a prescription, but it may differ state to state. So that's something you'll have to look at in terms of your own state's regulations. I'm not exactly familiar with what it is in other places outside of California. There's also a question about getting ulipristal available over the counter without a prescription. It is not available right now. But it is something that shouldn't make a difference between Plan B and Ella because there's really not any additional contraindications. So that is not available at this moment. But I know that people are working on it and trying to get it available over the counter in different locations, it's just not available over the counter without a prescription yet. And then the last question that just came in talking about re-dosing

oral emergency contraception. "So, if the half-life for Plan B is 24 hours "and if unprotected intercourse occurs 48 hours "after taking Plan B, it would be reasonable "to give Plan B again 48 hours after the first dose?" That is correct. We don't have a lot of evidence saying this is exactly the time at which you should re-dose it. The half-life is about 24 hours plus or minus five hours. And in women that are overweight or obese, that bioavailability is going to be lower as well. So, patients should always be counseled if they're not going to immediately start another method of contraception. to use the backup method for seven days in order to cover them if they do ovulate, because the whole point is that you're delaying ovulation, but you're not completely preventing it potentially for that cycle. So, it would be reasonable to give them Plan B again if they have another episode of unprotected intercourse 48-72 hours after they take the Plan B.

Renyea Colvin:

Okay, thank you Dr. Policar and Dr. Economou for your time today. I personally thoroughly enjoyed this presentation and the content that you provided. So, thank you for that. And also, thank you to our attendees who took a sizable amount of their day to be with us today. We greatly appreciate it. We want to encourage everyone to complete the evaluation of today's event which you should receive via email and on your screen immediately after we end today's webinar. And then of course, just a really quick reminder to stay safe and make sure you're keeping your hands washed and protecting yourself and others from this new pathogen that we're dealing with. All right, thanks everyone, and enjoy the rest of your day.