**2023 Virtual Women's Health Seminar Day 1 Transcription**

We're going to hear from some really great presenters who are gonna share important information with everybody in order to support engagement and smoothness and the seminar, we're gonna talk about some logistical reminders and expectations of everybody that's participating. If you can, please stay on your camera during the presentations. I apologize for mine at the moment, but if you can leave them on, especially during question and answer sessions. That would be great. You can always feel free to take them off if you need a break or something is going on. Make sure that you are muted during the presentation so that OK. we are not getting a lot of background noise and come off mute in order to ask questions or engage in the conversation at at any point when you need to. Finally, if you could use the raise hand function or the chat feature to ask questions or make comments, especially during the question and answer session after each presentation. Alright, next slide please. Uh. It for the next couple of days, we're gonna. I'm gonna talk. Talk to you just really briefly about the thank you about the the sessions, the presentations. We're gonna have six over the next two days. Each is gonna be given by a different subject matter expert. You can see on the slides an overview of the each topic for both days. Today we're gonna start with a presentation on preventative health care for service women by Lieutenant Commander Jodie Joint. Next, we'll have a presentation on understanding common Women's Health concerns presented by Lieutenant Adrian Gillis, and then we will close out today with Women's Health considerations prior to and during deployment by Commander Carolyn Ellison, and then after each presentation, you will have a time to ask questions during a designated question and answer session. If you, again, if you wanna ask a question, use the raised hand function so that you can be called on or type your question in the chat box. So that it can be found and addressed, we do want to encourage you to ask questions and stay engaged during that session, but again, staying muted if you are not actively speaking. We will wrap up today at around 1400 Eastern Time will begin the same time again tomorrow, so expect to be back at 1000 Eastern tomorrow and then we'll follow the same schedule. There is a different link for the session tomorrow, so you should have a the link in your calendar invitation. Again it is different from day one, so make sure you click on day 2 for tomorrow. OK. Next slide. We're gonna talk about continuing education, which is important for a lot of people. If you could. Do the following things were continuing at it comes through the DHA continuing Education Program Office. Refer to the slides, it will help you. But just for reminder you have to register officially for the conference no later than the 20th of January by 1300. So that's Saturday by 1300. Once you have registered and you've done both days then you can complete the program. Processed and evaluation by the 10th of February at midnight. You have to do both in order to get the certificate and we cannot extend the deadlines, so please just be aware of the importance of that. So register in the next couple of days and then complete the evaluation by the 10th of February. If you have questions or any concerns about those that process, please contact the DA support e-mail. They will be the ones that would be able to help you. OK. And then so we will move on to the first speaker, a Lieutenant Commander, Jody joint, who's gonna present on preventative health care for service women. I would like to thank Lieutenant Commander joint for being here, and I will go ahead and pass it over to you for a brief introduction of yourself. And to get started. Like perfect. Good morning, everyone. I am Lieutenant Commander joint. I am stationed at Naval Hospital Jacksonville. A little about me. I did my intern year in obstetrics and gynecology in San Diego, and then came out to Mayport for three years as a General Medical officer when I left San Diego, I said I'm never coming back to Women's Health. I don't like it. And then during my three years as a GMO, I realized that's really where my passion is. I love educating our sailors about their bodies, romance, health. Contraception, all those kind of things. So I went back to

San Diego, finished my residency, and now I am here. I am on call. Our babies upstairs seem to be behaving. But if I have to leave quickly, that is where I'm going. I have a wonderful midwife upstairs watching our laboring patients, so hopefully they will behave for the next little while. Umm I have no disclosures. And we can get to our learning objectives. So the big thing we're gonna talk about is what is a well woman's examination? I think this is a big topic and people think, OK, well, woman, it has to go to an OBGYN. And that's not true. Family medicine can do well, women exams, ICS, GMOs, flight surgeons, undersea medical officers, anyone who is a physician can provide a well woman exam. We're also going to talk about how to take a sexual history and overview of sexually transmitted infections. These are. What used to be called sexually transmitted diseases so your patient might refer to it as an STD. We now call them infections because they are treatable and a lot of them are curable. We're going to talk about mental health diagnosis and then routine critical health screenings. I know when I was in the fleet, the big three things I saw were Women's Health, mental health and musculoskeletal. So it's kind of nice if we're gonna talk about two of those 3. So we'll go on to the next slide, the next one. Perfect. So what is a well woman's exam? So it's basically just taking a comprehensive history and physical and tailoring those things to what your patients need. So you do your physical exam as indicated. It doesn't. Everyone doesn't need every single part of this, so you base it on what the patient's telling you their age based risk and also their risk based on their history, their screening, which includes cervical cancer screening, intimate partner violence and preventative health. Now when we think of cervical cancer screening, we think of PAP smears and we're going to go into that just a little bit. But every time you do a well, woman's exam does not mean this person needs a pap smear and we'll get into that in just a second. You can also have an opportunity to do an evaluation for what your patient may need education wise health wise. Any additional counseling and talk to them about immunizations and this is your chance to really talk to them about a healthy left lifestyle and minimizing risk cause this might be the only exam a patient gets in a year. They may not go for anything else, they may just do. OK. I did my well. Woman check. I'm good for a year. So this is your one chance to kind of capture those things the next slide. Alright, so how do we take a history? There's a lot of different parts of this, and I think it can be kind of intimidating for some people who aren't used to talking to people about their sexual history or their GYN history every day. But really, these are questions we should be asking. For men and women all about their sexual history, you're a physician. You're a medical provider. This shouldn't be something that you're embarrassed to ask them. It's important to help risk stratify patients. So you're going to want to know how many sexual partners they've had. Are they men? Are they women? Are they both? What kind of intercourse they're having? Is it fragile? Intercourse? Intercourse. Are they just having oral intercourse? How many partners? What kind of protection? They're partners. Are you using? These should be questions that we are very comfortable asking. And I know, especially when I work with medical students, it's they feel very uncomfortable at first because it feels like they're crying. But we're not asking these to be nosy. We're asking because it helps us risk. Stratify what the patient needs. You're also gonna ask them about contraception. Anything they've used in the past, what they're using currently. So if someone says, oh, yeah, I'm sexually active. What are you using for contraception? Nothing. Well, how are you going to prevent getting pregnant? So that can kind of lead you down a different lane of questioning. And it's very important to screen for intimate partner violence at our clinic. We're starting a new process improvement project where our Corman are asking everyone when they're partners separated from them. Are you harmed at home? Are you safe at home? Are you exposed to any kind of violence? Because especially in the obstetric population, our patients are extremely high risk. For intimate partner violence and the military population, we know that those

people at higher risk in the general population, so it's important to ask. You're also going to want to ask about mental health condition so that can be something as easy as a PHQ 2 in the last two weeks. Have you felt down depressed, or hopeless? It can be something as straightforward as have you thought about harming your killing yourself? And like I said, you're gonna ask him about sexual practices, and then any history of any kind of SIPID any kind of GYN specific history or complaints you're going to want to know when their last Pap smear was or cervical cancer screening. And that can be either asking the patient looking in jail V looking at all. So for those of you that still have that. So that way you can figure out when they need it again, do they need to be referred for something else? You're going to ask him about any history of any gym problems they've ever been told. They have. So a lot of people come in and be like, yeah, I had abnormal periods as a teenager. They were painful. I was told I had endometriosis. They never had a work up. They never had a proper valuation. That's just been something that they've been carrying with them in their history that they tell everybody. You're going to want to ask if they've had any kind of GYN procedures or surgeries. You're also going to get to physical exam when you do it. Inspection of their abdomen and everything, but it's important to ask. Have you ever had a camera stuck in your belly for every anything? Have you had a camera placed in your uterus for anything really break it down for patients because sometimes they're not going to know these big fancy medical words we use. So you're going to want to really drill it down and ask what they've had done and then for patients, especially patients who had children, older patients, any symptoms of prolapse, urinary or anal incontinence, meaning, do you feel a bulge in your vagina? Do you ever leak urine when you cough, knees laugh? Do you ever feel the urge to urinate and can't get to the bathroom fast enough? Or do you ever have Yeah. leakage of solid or liquid stool you can't get to the bathroom fast enough when you feel like you need to have a bowel movement? So these are all the kind of questions that we want to ask. Alright, next slide. And then the obstetrics history. So in the Navy and in obstetrics, we use a lot of acronyms and a lot of shorthand and one that you'll see are G, S&P's or gravida and para. And when I say G S&P's someone else who understands that is gonna know exactly what I said and saying, I can give a lot about a patient and a very short hand amount of time. So gravita just means number of pregnancies. No matter what happened to those pregnancies, anytime they're pregnant, that gives them a G. P. Para that's how you tell what happened with the pregnancies. So there's a short little acronym called Tea Pal, and that's the four numbers after the P so it's term, term pregnancies, term deliveries, even if it was from a stillborn born infant, that is 37 weeks in above, no matter how they were delivered, vaginal delivery, C-section doesn't matter, that's a term. Preterm, the P that's any delivery between 20 weeks and 36 and six days. So whether it was an abortion and abortion, a miscarriage, anything like that. The A is abortus, so any pregnancy that ended before 19 and six, whether that was an elective abortion and miscarriage, it doesn't matter that all goes into that a category and the L is living children. So for someone who's been pregnant. Twice. Has had one term delivery, 1 preterm delivery and has two living children. They'd be a G2P1102. They haven't had any pregnancies end before 20 weeks, so it's kind of a nice way. You can really summarize someones obstetric history. And just that little short time, a patient might tell you, oh, yeah, my baby came so early. And you're thinking, wow. But it was really at 37 weeks. So for us, that's still goes into that first that term. So you really kind of need to drill down how early was this baby, how many weeks were you that kind of thing? And then preventative health care, this is our really our chance to talk to the patients about what they're doing that might be increasing their risk for adverse health outcomes and how we can decrease that and also routine screening. So mammogram, colonoscopy, dexa, those might be for a little bit older populations, but some patients may risk into some of those things based on their personal

or family history. Also a lipid panel and mental health screenings like alcohol, tobacco use, depression, anxiety. You go to the next slide. OK, the pelvic exam. This is no longer recommended to be done universally every single visit, so ACOG is the American College Congress of Obstetrics and Gynecologists. That's kind of our governing body and that's who recommends. This is what you need to do in a well woman who can, Sam, this is what the physical you need to do. These are the histories you need to take. So just because they're coming in for a well woman does not mean they necessarily need a pelvic. That shouldn't just be an automatic coming from a well woman. They have to have a pelvic exam. You only do these to perform testing like a Pap smear or based on a patient signs. Complaints. So I think it's really important to educate patients about their anatomy. A lot of people just think what's down there is the vagina and they have no idea. There's lots of other different parts. The vagina is just the connection from the outside to the inside. There's lots of others of the body. Hey, what? I had a poster like this in my office when I was at GMO and I would routinely take patients over to the poster and explain, OK, this is the part we're looking at when we do a pap smear. These are the different parts of your pelvis, the different parts of your body, and really empower them to know exactly what's their physical and their anatomy is. So start from the outside in and this is also important if you do this physical to use these kind of body parts to explain what you're looking at. So for the external genitalia, you're just gonna look and palpate do they have normal hair distribution? Is there any swelling of the labia? Are there any defects? Is there any abrasions, those kind of things? Are there any anomalies? And then going further, you can do a speculum exam or a bimanual exam. We'll go to the next slide. All right, so speculums are used to do past mayors, but they're also used for lots of other different exams. So I think it's really important, especially for someone who's never had a speculum exam, it can be pretty intimidating to take a speculum out of the drawer, show it to them, let them look at it, explain why you're using it, let them touch it. All those kind of things. And it kind of at least, I found, demystifies it a little bit. It's also important to explain to the patient just because they have a speculum exam. Does not mean they've had a pap smear. I think a lot of times I'll have patients who have come and said ohh yeah, the ER did a pap smear. I'm willing to bet the house the ER did not do a pap smear. They use a speculum exam for whatever they were looking for, but they weren't doing it for a password. They have been doing it to collect specimens in those kind of things so you can do so. I think it's important to tell the patient why you're doing this secular exam. What you're looking for. And then the bimanual exam does not have to be done for every patient. A patient who you may do this on says, you know, I have pain on my right side and my pelvis low and some swelling and it hurts. That will be a good patient to say. Alright, let me see if I can feel if there's a mouse on your ovary. If there's something on your uterus I can feel. But just like not everyone needs a pelvic. Not everyone needs a buy me annual exam. You can really tailor that to the patients complaints. And then this also is a great picture to kind of show the tool that you use for a pap smear, this one in the picture has the brush. It's all in one some places you're gonna have the little spatula and the brush that you'll do those two separately. And I think it's also important to kind of show those to the patient and say, OK, these are the two tools that we use for cervical cancer screening. To get a thin layer of cells from your cervix, I put them in a little tube. Those go to the lab and that kind of tells us next steps. Alright, next slide. OK, so this is the ascp is our guidelines for cervical cancer screening. There's an app that's about I think, $10.00, but it's worth its weight in gold. You just put the patients Pap smear results and it tells you what to do next. It also stratifies it by age, which is really helpful. And if they've had HPV test or not. So age less than 21 you do not screen for immunocompetent patient. There's rare instances where you would start less than 21, but for the vast, vast, vast majority, even if they started having intercourse set 14, they do not need a path. For age 21 to 29, it's every three

years and then starting at age 30, Pap smear plus HPV screening is every five years. I tell patients. That's the one thing about good, good thing about turning 30 is that you don't have to have as many pap smears. So we call that Co testing after age 30. Between age 25 and 29, you're going to order reflex HPV testing, meaning based on what the cell show, they may or may not get HPV testing on that sample, and that will help tell you what they need next. So please do not order an HPV Co test on anyone less than 30, unless there's a very specific reasoning too. So blanket people don't need an HPV test less than 30. And the reason being because when you're young. You're more likely to clear HPV than an older patient. All right. We'll go to the next slide. So like I said, the app is great $10. You will never have to get it again unless they update the guidelines. All right, colposcopy is kind of the next step after a pap smear. So it's the same kind of setup. Use a speculum exam. It can be done by OBGYN, some family practice physicians will do it, and it's a looking at the service and a biopsy if one is needed. So I what I described it as a pap smears kind of a shotgun approach. Let's see what hits it. Colposcopy with biopsy is more of a sniper. I see something abnormal. I'm going to take that. Umm, we are not currently offering primary HPV screening. I think that's going to be something that's coming down the line. So stay tuned. But the HPV vaccine we do offer, we offer Gardasil for anyone ages 9 to 45, men and women. So the reason it's so so important is because HPV causes the vast majority of cervical cancers and abnormal cervical cells, and it's a lot of times people don't know they have it, they just pass it back and forth and back and forth and back and forth, HMV, so ubiquitous that it's been found under people's fingernails. So even if someone tells you I'm not having. Umm, we're separative receptive vagina. Penis. Intercourse. They could still be exposed to HPV through other means. Sexual activity. So I recommend it to everyone. Reasons that you would refer to someone like me or some of the other speakers, or even a family practice Doctor Who's has done extra training in OB is 1. If the app tells you two very helpful, they need a colposcopy. Two, if their passenger comes back with something called a typical glandular cells, because for some of those patients we may do an endometrial biopsy or at the same thing if they have atypical endometrial cells. So just basically go off and wait. The path here says plug it in the app and it really does tell you what to do. OK, next slide. All right, so same kind of idea as a pelvic exam, a clinical breast exam is no longer just blankly recommended to be done in everyone. We also don't recommend patients, OK on the 15th of the month. It's time to do my self breast exam. It's more important that patients have. What we call breast self-awareness, meaning they know what their breast tissue feels like on different days of their menstrual cycle, and they know what would feel abnormal to them. It is important to do a clinical breast exam if the patient comes in with breast complaints. Obviously I found a lump in the shower. I'm having pain. I'm having ****** discharge. That will lead you to say, OK, it's time to do a breast exam. Instead of just saying, alright, you're here for, well, woman time for your breast exam. Time for your pelvic exam, because that's just what we do for everybody. There are instances where you would offer additional evaluation, basically, and mainly imaging, so an ultrasound is more helpful for younger patients because of the density of their breast tissue. Mammogram more helpful for older patients. Now you're gonna read different things on different societies on when to start mammograms. Some say 40, some say 50. Bottom line no later than 50 no earlier than 40, unless you find a lump. There's something concerning. They have a significant family history or there's a clinical reason. Mammograms should occur every one to two years unless otherwise directed until the patient 75. The only way you can definitively diagnose cancer is through a biopsy. And what I found is if you can ultrasound or mammogram a lot of the times, the radiologist, they have a grading system for what the abnormality in the imaging looks like. And they may say, OK, recommend biopsy for this kind of. Lesion. So they make it a little bit easier for you. You don't have to decide this. This patient need to biopsy or not. All right, so next slide. So this is talking

about breast self-awareness reasons that a patient to tell you and come see you. So this is an important educational opportunity at a well woman exam. If you're not doing your breast exam to explain what the patient should be looking for, they should be looking for lumps, meaning something hard, firm that they find in their breast. And they're having any ****** discharge if they're having unilateral swelling. Meaning one breast is significantly different than the other breast. Any skin changes, skin coloring changes, ****** irritation, dimpling, anything that looks abnormal to them. And if they're ****** starts to look abnormal. So discoloration, flaking, pain, redness, anything like that. Uh, I think most females know that their breasts are more like cousins than identical twins. So they're going to look similar, but they're not going to look exactly the same. So that's why it's important for patients to know what their breasts typically look like and then how many differences they see. So if any patient comes to you with any of those kind of complaints, then you're gonna do an exam. And then order imaging if needed. All right. We'll go to the next slide. So this is how you are gonna do your history and physical most important history. When did this start? What have you noticed? What did you notice? Say two months ago? How is this different from your last menstrual cycle? How is this different from the other breast? To really kind of drill it down and see how the patient describes the reason they're coming in. You're also going to want to know family history. Any one in the family have any similar complaints? Any family history of breast cancer, men or women in your family? How old were they when they were diagnosed? What do they have done? Did they need chemo radiation? Did they need surgery to really kind of drill it down and figure out what their risk are? And then you're going to do your physical where you're going to look for symmetry, any skin changes. You're also gonna wanna help with their lymph nodes in their axilla. And then you want to describe the mass as best as you can using a clock face. So you wanna wanna say OK in this patient at 3:00 o'clock. Uh. A and try and give a sigh so that way when they go for imaging, it helps guide the radiologists and what they're looking for. Different things you might find a mass like I just said and you kind of ****** discharge or breast pain is also important to discuss with the patient. Things are going to want to do that are pretty easy to do. A urine pregnancy test. So if a patient comes in, it's like, man, my breasts are really, really tender. They may be pregnant, they may not have thought. Hmm. Restore tender. I'm nauseous. I haven't had a period in a couple months. Maybe I should take a pregnancy test so it could be something as simple as let's do a urine pregnancy test. And then imaging you can kind of start the ordering process based on age. So less than 30, you can start with an ultrasound greater than 30. You can start with a mammogram and for a younger low risk patient, you can also consider. Alright, let's evaluate this for menstrual cycle and come back. Alright, next slide. OK, so if you see a mask or abnormal discharge, especially if it's from one breast, meaning it's you unilateral, it's coming from one duct that's a little bit more concerning and something like bloody that would be something you would definitely want to go ahead and refer to a specialist. If they're having breast pain, you wanna think, OK, when does this pain start? What is it associated with? Consider recommending supportive bras, especially if the pain is associated with high impact activity. Trying to avoid triggers and then something as simple as vitamin M Motrin can be very helpful for breast pain. And if the breast pain started with a patient starting an oral contraceptive, you can look into that. Should we try a birth control pill with a lower estrogen dose? Should we switch you to something without estrogen, like an ID or the nexplanon? So that's why history is so important. If you can kind of pin down when this pain started and any other associated changes in their lives. And the reason you would want to refer to a breast Health Center or a general surgeon after you get your imaging for a mass. For the ****** discharge, especially in a high risk patient, or if you've tried a lot of conservative treatment for the breast pain, that's nostalgia and nothing works. And prior to referral like we are, I've already said the exams very

important, the history and the physical are very important and the timing of symptoms is very important because it's nice and helpful if you can give your consultant kind of a complete package of, OK, this is what the patient said. This is the imaging I've done. This is what I found in physical and then they can go from there. Alright, next slide. OK. Like I said, all of these colleges and advisory bodies cannot decide on when they recommend starting mammograms, which makes it really easy for us really easy for the patients to be like, OK, let's just pick, I think this confusion kind of leads can sometimes leads to patients not getting mammograms until much later because they don't know when they should start, how often they should get them. So some as you can see, say start at age 40. So the American College of Radiologists, it's great start of 40 do it yearly. And others say, alright, this can be shared decision making or an individualized choice. Bottom line, everyone says start at least by age 50 and then when to stop. Can kind of depend on your patient's priorities, your patients risk, and how long you think their life expectancy is. So for someone who is 75 with. Flamingly uncontrolled diabetes, high blood pressure. And really terrible cholesterol. And they've already had an amputation from their diabetes, and they're on. On dialysis, maybe if they even if they have breast cancer, that's not gonna be what kills them. So maybe a mammogram is just not quite high on the priority list. So you can talk to them about. All right, I think we can probably stop me in the grams for you and maybe focus on your other medical issues. But I think this is a nice chart to kind of reference when you are counseling patients who are interested in starting mammograms. And this is from the CDC. All right, next slide. OK, so immunizations. And the well woman exam is a really great time to get patients caught up on immunization series or start immunization series. Like I said before, Gardasil. So, so, so important. And for everyone ages 9 to 45 to be offered men and women, there are. Two dose series or three dose series based on the age of when they start them and you can recommend these even if they've been HPV positive on a screening before like a Pap smear. It just recently changed not that long ago, of the 26 to 45 offering it to them, I think benefit kind of outweighs risk, especially because a patient could get HPV clear it on their own, get the vaccine, be exposed to it again and now their body is ready and more able to fight off the virus. So that's why, yes, it's shared decision making. But I also think it should be recommended and offered for the patients in a little bit older population. This vaccine cannot be given while pregnant, but once they're have delivered, and even if they're breastfeeding, it's OK to give. And the nice thing is that you can resume the series wherever they left off. So if a patient says, yeah, I think I got it when I was like 14 and now I'm 22. But I only got one. They can get the second one and the third one, they don't have to start back over. Umm, some of these vaccines are for a little bit older populations. So zoster start at age 50 and pneumococcus start at age 65 or sooner if they have certain medical conditions and from influenza as we know active duty are required to get it annually. It's also really important if a patient is considering pregnancy or they are pregnant to get their influenza vaccine, it is safe and pregnancy and we know that patients who get the flu while they're pregnant have higher risk of adverse events for them and for the baby. Alright, next slide. This kind of goes into all of the other recommended vaccines, the vaccines that you can get while pregnant. Tdap. We recommend that in every pregnancy. Influenza are the two kind of big ones and also it's important to get anyone who might be around the infant vaccinated for Tdap if they haven't been vaccinated in the last 10 years. So I think this chart is really helpful. It's also from the CDC to kind of tell you when they should get the vaccine and how old they should be when they get it and how many doses there are. So this is kind of a nice thing to reference, but a lot of these vaccines. Are important for readiness, so patient may not be fully medically ready if they don't have some of the required vaccines. So whoever is in charge of keeping it with readiness for your. Sailors will know. OK, this is the vaccine. They need to get. Let's make sure they get it. Umm yes. And the code of vaccine. Also

very safe in pregnancy, definitely should be given it's not on here. All right, next slide. So kind of going away from vaccines back to sexual health and screening for that. So you can start with a very open-ended question. Do you have any sexual concerns? And sometimes that's all it takes for the patient to go into any questions or concerns they have. And then if they say no. Or they're not really engaging in the conversation. Then you can start dialing into some of the more specific questions. Have you ever had sexual relations? Are you sexually active now and sexually active can mean different things for different people, so it's really important to drill into exactly what that means for them. When did you last engage in sexual activity? They say no, I'm not sexually active. But I happened in the past. Does that mean two days ago, does that mean two years ago? And and then, like I said, it's important to ask if your partner is men, women, both. And then any new partners, do you think your partner has a lot of different partners because that can help risk stratify for someone who may be at risk for a sexually transmitted infection? And then how do you protect yourself against pregnancy? I have patients that say, oh, you know, we're just gonna wing it and see what happens. Like, great, then you need to be on a prenatal. Let's talk about preconception counseling. Let's get some labs, make sure immunized. And if you really make it kind of tell them there's a distinct possibility that you could be pregnant if you're not doing something to prevent it. It kind of gets him to refocus and shift their thinking and think, OK, maybe I should actually be more proactive in preventing pregnancy. And then you could offer the patient. Would you like to be screened for sexually transmitted infections, especially if you're already planning on doing a pelvic? It's really easy to add that swap, or you can offer urine screening for things like onry and chlamydia, and then blood screening for some others. And then if the patient is thinking about pregnancy, you can offer them preconception counseling. If they're not. Let's talk about contraception. Alright, next slide. We're going to talk about sexually transmitted infections. OK, So what are some common symptoms that may present with something like gonorrhea or comedia? We already said HPV doesn't really have any symptoms. And sometimes for gunnery and chlamydia, the answer is no symptoms. They may be completely asymptomatic, which makes it OK. harder to diagnose, and it's why it's important that we capture these people at our yearly well womans to offer them screening, or if they're less than 25. To recommend highly, highly recommend annual screen, you can't force someone to get screened, but these patients are That's scripts. at higher risk and it's easy. You pee in a cup, that's how But. they can test. So it's really important to offer and recommend it to them. So we can go to this next slide. So this is a really great chart to talk about age, pregnant or non pregnant. HIV effective populations are not and when you The box. should screen this isn't something you have to memorize, you can always. And reference this chart. So for the younger population, gunnery What's the meaning? Incomedia annually, that can be done via urine. Or when you do a Yeah. pap smear just with a little sample. Right on. HIV done at least once. We're in the military, we get screened for HIV all the time. I know, I apologize. And then if a patient got increased risk, you can screen Hi. for things like syphilis or blood test trichomonas through a That was worth it. swab on a slide and then happy. You're welcome. And hepatitis C, they should be screened at least once if they're over 18. And if you're in a high syphilis population area, which Jacksonville, FL is, they should be screened for syphilis. Have more often, especially if they're pregnant, so that kind of talks about this here. So if it's in the first trimester, third trimester, if at high risk, meaning the patient is at high risk or they're in a high risk area. So here we screen everyone. At their new OB visit and also at 28 weeks. So just something to consider based on where you're stationed. If your general population, pregnant or not, is that increased risk of syphilis? And then for the HIV population, because that HIV is becoming something that people can live with and we will have people stationed all over with HIV who are well controlled on their medications, it's gonna

need to be something that you may start seeing and you're gonna need to know, OK, what do I need to screen these patients for? So this is a nice chart to reference. OK. Next slide with a fun picture to wake you up, this is chlamydia. But the majority of patients are not gonna be symptomatic at all, or they may have very nonspecific symptoms and normal bleeding, bleeding after sex, changes in discharge, or symptoms. That kind of sound, like a UTI peeing a lot, paying with your nation. You may or may not see something that is so striking on exam there cervix may look very normal, so you can't just say ohh this looks great. You definitely don't have committee. That's why testing is important. First line treatment is doxycycline twice a day for seven days. So I'm sure all of your patients are super, super compliant, but I know for our patient population sometimes taking a pill twice a day for seven days, especially one that may upset their stomach, give them a sunburn, cause more sensitivity in this Florida sunshine. It may be better to offer them the non first line treatment, but something that they are more likely to complete which is azithromycin 1 gram PO, it's a powder. You mix it, they can drink it right in front of you, it's pretty easy. And then there's another alternative called Levofloxacin. It's also a seven day treatment. Those you have to consider that. And then you can do expedited partner treatment, meaning your patient calls and says, hey, my boyfriend got treated for chlamydia. Can you call me an in for me, great you can call that in or your partner's positive your patience positive if your partner is receives Tricare you can call in or write them the prescription too. The CDC is always gonna be updating the treatment guidelines. All right, the next one, Claudia's best friend. Gonorrhea, again? Very in their physical symptoms, they may be asymptomatic, but they may have those cervical changes. I'm normal bleeding things that sound like a UTI. Abdominal pain, those kind of things. If a patient looks sick and we'll get to this in a second, you need to be concerned for more than just a simple. Infection and this is diagnosed again with a urine sample or a swab. The treatments are listed below the Nice easy one is just set set trioxane one shot and you're done. So for a patient who you want to. Ensure treatment. You can give them a shot and a shot for both gonorrhea and commedia. And then here's the alternative regimens below. If you don't have testing to say that the patient has gonorrhea Comedia, and you're trying to cover both, that's appropriate. If the patient tests positive for gonorrhea and negative for chlamydia, you're only going to treat them for gonorrhea. That's a little bit of a change in the CDC's. Recommendations over the last couple of years and you're if you're not sure, just check their website. OK, next slide. So this is kind of what happens when gonorrhea committee rather affections kind of go crazy. It causes something called pelvic inflammatory disease, which is associated with abdominal pain, abnormal bleeding and also significant pain on exam. And there's something associated with this called the chandelier sign, meaning when you move the patients cervix, like during a speculum exam, they wanna jump for the chandelier because they're in so much pain. So these patients are not going to tolerate any sort of pelvic exam very well. And you do not have to feel like you need to do the full on lab. Exam CBC, CRP all those kind of things. This is more of a presumptive diagnosis. You're going to start treating. Don't delay waiting for a gonorrhea or chlamydia. Or any other kind of results, because that's just gonna delay treatment and only going to make things worse for your patient. OK. Next slide just talks about treatment. So the recommended treatment now this can sometimes change in the CDC again is always updating. This is ceftriaxone, **** and metronidazole. So again the same dose of ceftriaxone, the doxis the same and you're adding. The metronidazole or the flagyl? And the manufacturers of metronidazole recommend that you tell your patient no alcohol intake. Why? While they are taking this medication, because it can cause nausea, abdominal pain and those kind of things. And there's some alternatives listed there. The important and reason that we are aggressive about treating this and not waiting for the lab result is because uncontrolled PID can cause tubal scarring, can

cause a variant, abscesses can cause infertility later down the line. So a patient may think ohh I just need to take a couple pills, get a shot. This is no big deal. I'm fine. And then they get Commedia again, and kamidia again and Comedia again. And they're 19 and they don't care. But in a few years they may care. So it's important to tell the patient. Look, we're gonna treat you and your partner for an infection, but you need to consider safe sex practices because not only is this an infection, now it can have lifelong consequences. So really kind of tell your patient why we're treating you and why we're being aggressive about treating an infection, even if we may not know exactly what we're treating and the instances of PID. Alright, next slide. OK, HPV not only can cause cervical cancer, it can also cause warts. So that's another reason to encourage the Gardasil vaccine, because it can protect against some of the strains that cause cervical cancer and also some of the strains that cause. Anogenital warts and these things can be very annoying to patients, so if you've been, they can do something to prevent them. Then. Great. There's a couple of different treatment options kind of based on what you are clinic has and also a clinic. You refer a patient who has. So not everyone has TCA. And not everyone would feel comfortable with doing surgical excision. Whether it just to let the patient know there's a couple of different options based on where their words are, how big they are with the disease burden is. Alright, next slide. OK, Trichomonas trichomonas is associated with a very, very foul smelling discharge. A lot of the time. So if a patient has trichomonas, you may know before you even do the exam before you even send the slides down to the lab. It's a pretty distinct malodorous discharge. It's frothy, it's green, yellow. It looks abnormal. Again, the patient can have some nonspecific symptoms. Burning with urination, urinary frequency, abdominal pain, and when you do the exam, they might have little hemorrhages on their cervix. Called a strawberry, they called us strawberry cervix, so it's gonna look abnormal. And then it's diagnosed by microscopy. You can see these little swimming around guys under the microscope and the treatment. The first line treatment again is flagyl twice a day for seven days. And again, it is recommended that your patient avoid alcohol while they are taking flood. Alright, next slide. Get close. OK. If you have a patient who's continually having recurrent sexually transmitted infections, there may be a couple of different reasons they may be noncompliant. They may be having persistent high risk behavior. They get it, you treat it, they get it again, you get it, you treat it, they get it again or very rarely are resistant string. So that's like I said, it's very important when you call the patient to say, hey, you have chlamydia, I'm writing you for this medication, but also. We need to talk about what we can do to prevent this from happening in the future. So, condoms. Condoms. Condoms. Partner treatment and trying to limit your sexual partners. And then syphilis, it's important to determine when they had a positive test in any other symptoms they had. And you're also going to want to test for HIV if you have a positive. Simplest case, and then you're gonna refer these patients to infectious disease because their treatment is kind of based on. Other symptoms, if it's primary, secondary, tertiary and how long they've had a positive test. OK, so a reason you would refer these patients is if you treat them, they are compliant. You know they finish their course, their partners been treated. And they're still infected because that might be a reason to kind of look into see if it's a resistant strain. If they, if you diagnose HIV or syphilis, you're going to want to refer those patients too. All right, next slide. HIV, with the amount of screening we do for HIV, you may diagnose, diagnose someone. With HIV. And some of the symptoms can be very, very vague. They have weight lowness, they have fevers, headaches, sore throat, rash, diarrhea. So it can kind of run the gamut of things. And some patients may have ulcers. HIV is an opportunistic HIV is associated with opportunistic infections because it impacts your immune system. It's easier to get kind of weird or abnormal infections because your body can't fight those off as well. So if you diagnose something a patient with something that you're like, I've never had a patient have this

before, this is a little abnormal. Just get the HIV test too. And those are some pictures of oral Candidiasis or yeast infection in the mouth and then the ulcers. Alright, next slide. OK, how do you prevent? And HIV. Condoms, condoms, condoms. A patient needs to use protection. Barrier protection. But now we also have great medications for pre exposure and post exposure prophylaxis. So for prep pre exposure this is recommended for an HIV negative person who has at high risk for getting HIV from either their partner who they know has HIV from risky sexual practices or from injection. Jack Reese. So first up. You gotta make sure the patient doesn't have HIV. And then you're gonna wanna screen for other sexually transmitted infections, like gonorrhea and chlamydia. Rectal oral, vaginal screen for syphilis. And you're also gonna want to get a baseline serum creatinine. And you're gonna want to test them for hep B and hep C and then, of course, pregnancy. Alright, next slide. OK, this last couple slides are talking about mental health considerations. So you've talked to the patient ad nauseam about their medical history, their surgical history, their family history, their sexual history, their social history, and now it's time to kind of talk to them about. Their risk for any mental health disorders. Have they been depressed? Have they thought about harming or killing themselves? How they thought about harming or killing anyone else? You could also talk to the patient. Kind of based on what you've got from their history, are they at risk for an eating disorder? Are they at risk for things like PTSD? So really, you can kind of tailor it based on what the patient's told you. And then this kind of talks about some stress management techniques, things like relaxation or meditating can be done anywhere. The furthest remote duty station. Major Metropolitan city. It doesn't really matter what resources you have, this is something that a patient can do and one relaxation technique that works on my 4 year old. So maybe it'll work on your 24 year olds is just to do breathing where they take their hand they breathe in, they be that they be then. They breathe out, so they traced their hands while they're breathing and something like that is enough sometimes to avoid the preschooler meltdown, and it may be enough to avoid your patients meltdown too, because it kind of gives them a second. To recenter. Umm you can also work with a therapist for coping skills military one source is great fleet and family. There's different mental health providers within the military. There's phone applications, things like calm headspace that can help walk them through a meditation. And then I can't stress enough. How important exercises and having a daily or a couple times a week exercise routine in Great Britain for things like mild? And depression or different kind of pressure episodes, they actually start with exercise as a first line as opposed to something like an SSRI. There are definitely patients who are gonna need pharmaceutical help for their mental health. Disorders. But for some patients, all it may take is some breathing exercises, some coping mechanisms, and exercise. It's amazing what a routine like that can do for someone. And then you'll get more information about mental health later on. OK, so that is all I have. Umm, I will open it up to questions. I was trying to. Read through some of the questions in the chat, but if anyone. Has some questions now. Hi, thank you for the presentation. It was really good. This is Commander White from Naples, Italy. I put a couple questions in the chat just so I can remember. I don't know there was a couple, I don't know if you were able to see them, one of the chat, one of the questions where this may have been addressed. Are these slides available for us or is this just particular to the seminar and we'll let you go there. You wanna answer that one first or you want me to continue? I. I think the slides will be available, but correct me if I'm wrong from the organizers. Hi ma'am, this is Shannon Fitzpatrick with the Deloitte support team on. The slides will be available. Then you have to go through view Med PO approval and then they'll be hosted on the Women's Health web page. So when that's possible, I'll make sure that everyone who's in attendance has that information. Thank you. And also another question was as far as resources as we stand up these women health clinics and even like for our walk in contraceptive care

clinics, is there a resource or is there a specific funding for resources like the pelvic picture of the pelvis, the picture of the breast? Yeah. Who do you? Are those available for print? Look, it's beautiful. Your audio. So. Hello. Umm and my and my clinic in Mayport. My Corman, who ordered all of our supplies, they were able to use our budget to order the models and things like that for me. OK. And where do you have a specific site that you use utilized was just regular CDC or? Moses stuff came from the CDC. OK. And then last question, sometimes I'm a primary care provider, so there's all, there's always times where we will have Members come and ask just for on demand STI screening. So a couple of the providers were like, well, what screening do you get for the person that just wants on demand, STI screening, a lot of them do it for kind of just compassionate care. They wanna make sure they have a clean bill of health before they enter a new relationship. So what are your thoughts about that? I think especially since a lot of these things are asymptomatic, if a patient comes to me and wants STI screening, I'm gonna order it for them. So that will be a urine, gonorrhea and klamydia HIV syphilis and then hepatitis. If a patient is concerned and wants to swap to check for something like Trichomonas, that can also be offered too. I saw a question from Captain Elmore. Hi, ma'am. And we talked about how you don't routinely, do, you know, blanket pelvic exams. But she brought up that because some of these patients may not know very much about their anatomy or may not understand their symptoms. Or if they're at high risk for fibroids, I think it definitely could be a reason to do a pelvic exam and explain to the patient what their nomy looks like instead of just using a picture and what they're uterus feels like. So they can kind of understand. Ooh, I do have a fibroid. I don't have any symptoms, but the doctor said they felt something. That's just something I need to be cognizant of. So anytime you can empower a woman to know more about her body, I think that is a great thing to do, even if it's not a blanket like. You must do a pelvic exam. There are definitely indications to do it outside of a patient. Symptoms just for education. Anything else? Hey man, this is Lieutenant JG Walker. Long time no see. I actually worked with you. I was one of your nurses at Balboa. But I had a quick question. So Lieutenant, Santucci and I she's she's my doc. Where we're over here in Bahrain. And a big thing with us is is carewise and and what we can do. Do you have a certain recommendation for how long? Well, women exams should be booked for. I know right now we do roughly 20 minutes or so, but especially when a cute things pop up or they're booked for a while women's exam and then it's. Oh, I also have acute hip pain which do you recommend a longer time for those kind of Right. Yeah. appointments just so we can get everything addressed with them. I would say if you had the luxury of like a 40 minute I. visit, especially if you think you're gonna do an exam, that's great. Now if you have a patient who you've seen before, you're not gonna have to take the full history because you already know that that's a kind of patient that can get a 20 minute. Well woman visit because you're just updating things. But for a new patient, someone who's going to get there first, pap smear someone who you're thinking they may have other complaints if you have the luxury of giving them a longer appointment. That's always wonderful. Thank you, ma'am. Much appreciated. Hey, ma'am. Isaac Edwards here with the Gerald R Ford on the ship's position. I had a question about recurrent. Sorry, my dogs are barking in the background. I recurrent BV on the ship. We seemed. I feel like there's a higher. Higher prevalence of recurrent BV and I don't know if there's any specific practices that you recommend to your patients or I know we go down the line of treatment and we. You know, doing more long term treatment and boric acid and things like that, but is there anything as far as prevention Umm. that you recommend? So there is some data coming out about possible like vaginal probiotics that might be helpful. That's not really widespread yet, but I'm hopeful that there will be something like that in the future because I feel like I also saw a lot of recurrent BV. For patients, and if you've done the. Metronidazole for a long time or the metro gel and you've done the boric acid. Umm, a

lot of the things that you can offer the patients are probably already going to be doing, so hygiene practices, limiting sexual partners, cleaning toys if they're using them. All those kind of things can reduce the risk, but I'm hopeful in the not too long term there's going to be other options available, but it sounds like you're kind of doing. Everything you can be doing and then just reinforcing good hygiene practices and then really cleaning toys is also very important for patients to be doing. OK. Thank you very much. Hello. Hi, good morning, ma'am. My name is Lieutenant Rick and I'm one of the PA's over in Everett, in Washington. My question for you is you mentioned that with mammograms, there's no clear consensus as far as how often they should be done either one year or two years. It's kind of at the patient's discretion, but I know for my active duty members, especially since it's a readiness issue, a lot of a lot of the times that are given a choice. So as far as the military is concerned, what is Umm. the recommended time frame for which these should be done? Is it every one years or can we extend it to two years? I think if a patient has a completely normal mammogram, it would be every two years, but that would be something I will double check with. Whoever's in charge of readiness for you. I think someone else brought that up too. Gotta be. Got it. Ma'am. Thank you. And then my other question is, so I I love the SCP app. As far as the cervical cancer screening interpretation, I have in the past couple of months run into results where there are Pappas normal, but there is a mention of excessive hyperkeratosis and that is not something I was able to find really anywhere in up to date doesn't really give clear Umm. guidelines as far as to whether that's something we should be concerned about. Do you have any feedback on that? That's not something I would be concerned about the as long as there's no like dysplasia or evidence of abnormal cells in that way, then hyperkeratosis isn't something that I would change their screening based on whatever they needed to be screened for before. Understood, ma'am. Thank you. I think someone else brought up that based on the changing population and the fact that we are seeing more transgender patients. It might be something that a patient who is anatomically female, so they still have to come further, cervical cancer screenings. It's important to be sensitive that this patient may not want this exam to be called a well woman exam because they don't identify as female anymore. So it's really important to know the patient population you're serving and to be sensitive to how they want this exam to be called. They may not want to refer to their nanny as breast. So having that Frank conversation with the patient of. What do you want to call your body parts? What pronoun do you prefer? What name do you prefer? What do you want me to call this exam? If you're open and honest with them and just asking out of a wanting to know and wanting to serve them better, and I think that they're gonna be more open to having that dialogue with you about how that you can do this exam to make them the most comfortable, but also to provide them the best medical care. It's doctor Kozar is out in Japan. Just had put something in about Truvada. Are there fitness for duty implications or deployability issues with the Med now? Last time I looked there was a pretty good outline for when they could be on Truvada. This was a couple years ago when I prescribed it to someone that they the guidelines recommend taking them off during deployment. I'm not sure if that has changed recently. To me, that kind of felt unusual because we know that people are gonna have The high risk time, right? intercourse and yeah, right. So I don't. I didn't have to take the patient off the ship. They were able to stay on the ship on Truvada. Yeah, it would seem to me like a just normal. Here's your six But I don't know if that's. month deployment, you know Med, but I just wasn't sure. Thank Right. you. Just wanted to say for Truvada it so that they want, they're supposed to get tested every three months for HIV. So I don't know if you have the port for the of the ability to get someone that HIV testing in the middle of your port visit. To continue. That's a good point. And then someone else said that going back to the mammogram question is that it does not affect readiness. So you can base frequency of mammograms

off of the clinical picture. No. OK. Well, there's no other questions. And thank you very much. I think the bottom line is get the SCP app. And then this is your chance to really ask your patients and do preventative health. That's so important. If we can catch things early to help prevent them from becoming an even bigger problem in the future. The tenant commander joint. Thank you so much for your time, ma'am. I think we all really appreciate that presentation and UM, appreciate your time. So thank you. Are there any final questions before we continue? Alright. Thank you again, ma'am. As mentioned, you're welcome to Umm. stay for the rest of the seminar of. Sounds like you've got a busy day. So you're. You're welcome to to hop off. But thank you again. Thank you guys. Have a great day. You. Bye bye. All right. So our next presentation will be understanding common Women's Health concerns by Lieutenant Adrian Gillis. Umm, that is scheduled for 11:30 Eastern today. So we finished up a little bit early. Just wanted to double check the tenant Gillis, are you on the line, ma'am? I did not see, but we'll just double check. Yes, I'm on the line and I can start whenever it's convenient for you guys. No, thank you so much, ma'am. All right, then I will hand it over to you, Lieutenant Gillis, if you don't mind. Just giving us a brief background. Self introduction and then you're welcome to go ahead and get right into the presentation. Thanks, man. Sure. So my name is Adrian Gillis. I am a staff now at Balboa here in San Diego. I just spent the last year prior to this on unaccompanied Tour de Acuna, Japan. So have been able to experience some of the more remote medicine and interact more closely with GMOs and flight surgeons as kind of they struggle through some of the limitations of providing appropriate healthcare for our women or female service members. I have no financial or any other disclosures. So if you things that we'll go over, there might be some overlap with Doctor John's presentation as well. We'll review some key elements of vaginal care. We'll talk about the menstrual cycle as well as I can help patients manage menstrual cycle talk. Additionally about contraceptive methods and then do a brief overview of pelvic pain and pelvic masses with pelvic pain probably being hot commodity of a thing that you see in your clinics or as patient complaints, well, briefly discuss infertility diagnosis. And the evaluation and give a brief overview of management of nausea and vomiting and early pregnancy. And then additionally we'll review some basics or needs for medical evacuation for Women's Health related concerns. So first we'll talk about vaginitis vaginal care and appropriate hygiene. So for vaginal care and hygiene kind of explaining to patients at any well woman and visit, what is normal and what to expect can be helpful. Generally we describe normal discharge as clear, white and odorless with there being some caveats and kind of variation within this. So normal discharge. Yes. While it's clear, white and odorless, there can be a slight odor to it that is also normal. It can also vary throughout the menstrual cycle. So. Even some pinkish discharge just before the menstrual cycle, or having more like yellow changes throughout the cycle is normal. Drastic deviations from this in color, such as green extremely foul odor. Really excessive discharge can be signs of abnormal discharge and thinking about how the basics to care for the ***** and the vagina generally less is more. The vagina is a self cleaning organ. We do encourage patients to avoid irritants that can alter that acidic environment. So. The vagina does have a lot of healthy bacteria. We do tell patients. Please, no touching, no using of specialized vaginal soaps and no, actually cleaning with soap inside the vagina. We do encourage patients to just wash the outer genital area daily with mild soap and water. Some things will say the fragrance free is recommended, however. I guess many people do use fragrant soap as that is enjoyable, so don't necessarily need to recommend to your patients to do fragrance free. But if they have. Irritation or issues with discharge, then recommending them switch to more milder fragrance free soap. In terms of pubic hair removal, this is obviously something that is fairly common. There's no real. Health concerns for why you should not do pubic hair removal, but there's also no evidence that it is helpful. So with pubic hair removal,

whether it's waxing, using at home chemicals, shaving, there are risks associated to include mostly ingrown hairs as well as pain. But also talking to patients about waxing or chemical removal care that this can cause irritation or damage to the skin, such as like even. Mild burns. If the wax is too hot. As Doctor Joint said really recommending those patients clean sex toys and do not share toys and then appropriate hand hygiene, washing your hands before and after changing a menstrual product, just as you would if you were to use the restroom. So vaginitis probably the biggest topic that comes into People's Clinic and was we briefly talked about bacterial vaginosis. So in talking to patients about vaginitis. Getting a thorough history from them can be helpful to determine the severity of their symptoms, so asking for those associated symptoms like fevers, chills associated to Syria, abdominal pain or pelvic key, figuring out the clear timeline of how long these symptoms have been going on. Is this something that's been happening for the last three months? Is this happening since they got NID? Figuring out really what the inciting factor could have been. Talking to them about past history of infections, so we'll talk a little bit more about recurrent vaginitis shortly. But determining if they've had these symptoms before, did they resolve on its own on their own? Did they get medication for it? All can be helpful in how you treat these patients. Moreover, asking patients when their last period was, as we talked about. The vaginal discharge can change throughout the cycle, so if they are about to get their cycle, they may have more discharge than they did one week ago and then asking about current contraceptive use. So especially with the Marina IUD, one of the functions of that is to increase cervical mucus to therefore. Went down. The sperm from like entering the cervix so increased discharge can be an expected. Consider complaint or side effect of Valud could help you explain the vaginitis symptoms. Also, asking patients about STI risk factors, so whether they do have multiple partners, whether they're using anything for protection, condoms. And seeing if they're partners recently have had sexually transmitted infections. As for a physical exam. It is obviously gonna be dependent on your location if you have the ability to even do a speculating exam, although this would be recommended for patients complaining of vaginitis symptoms. So when you do the speculum exam, placing the speculum and then fully evaluate what the cervix looks like so briefly earlier, we were talked about strawberry cervix, so seeing if there's anything abnormal on the cervix describing the quality of the discharge. So does it look like normal? Physiologic white thin discharge does it look thick, clumpy, consistent with yeast, and we'll go into some tables in a second that will be helpful to you as well. And then do you see any areas of active bleeding? So is it like an ectropion or a really flyable area of the cervix that's causing the patient to have post coital spotting or something of that sort? The description that you can give on the speculum exam can be helpful also at this time. The speculum exam is a great time to collect slides for microscopy if your clinic allows for this or if you have the ability to send them to a lab. As well as possible like gonorrhea, chlamydia. Swab, which can also be done with the urine and the bimanual exam. This is more important to look for progressive vaginitis such as like PID that doctor joint talked about associated with video or other microbes. For the bimanual exam, often people will document that a patient has cervical motion tenderness when they just have discomfort on receiving a bimanual exam. So one practice that we learned throughout residency was to start with the exam, ask them if they have pain just while the two fingers are inserted, and then be able to touch the cervix and ask if this pane with moving the cervix is different than the initial discomfort. So that will help assess peritoneal signs associated with PID. As for the laboratory evaluation, again it's going to be very dependent on your institution. And kind of the turn around time for tests. I know when I was an evil Clooney, it took about anywhere from 10 to 14 days to get back chlamydia, gonorrhea results, whereas here at San Diego, it's probably one of the first labs that comes back within 24 hours. So offering the STI screening to include

chlamydia, gonorrhea, herpes, syphilis and trichomonas, which is done with the swab, if you are qualified in microscopy or you have it in your clinic, you can self perform it on the microscope. Otherwise you can collect. A lot of swabs to send to the lab for slides. Again, if you have a lab qualified to do so. If this is not available, you can treat simply based on the presentation or the symptoms. So a little bit more about kind of types of vaginitis and what is on your differential diagnosis. So we talked about physiologic discharge being clear, white, creamy and thin, again some tinge of yellow is within normal as well, bacterial vaginosis having the characteristic Gray green thin fishy odor. Umm. Or a foul odor. And sometimes patients will have like irritation with this as well. The Logcat, Volvo, vaginal Candidiasis, or yeast infection. That's the classic thick white, extremely itchy presentation, and then a trichomonas can definitely vary. Can be anything from asymptomatic to file discharge, or about 30% of patients can present with post coital bleeding and then dermatitis. So nothing really happened to do with a vaginitis, but still in the same area that patients again like doctor joint said have. Low familiarity with their anatomy and describe vaginitis as even like an itching of the external genitalia. Diagnosis of vaginitis we briefed on this a little bit before, but microscopy using the wet mount or pada. Potassium hydroxide. That helps to show the east and then like nucleic acid amplification test, which would obviously would not be done in your actual clinic, but the lab and then PHP testing can be in the most basic forms of testing. That might be available on like some ships rather than. I mean it is also available in clinics, but you might not have microscopy and the new play acid test, so PHP testing possible. Treatment some of the most common ones here for bacterial vaginosis would be starting with metronidazole or yeast infection, starting with fluconazole orally. The caveat being if your patient is pregnant, avoiding fluconazole or diflucan in the first trimester, we often or some providers avoid it throughout all pregnancy. But clotrimazole cream is also an option. And then Trichomonas is also fragile or metronidazole. Again, this list is really not inclusive. The CDC does have a ton of treatment options, and then there will be a slide in a second that has kind of it broken down a little bit more clearly. Referral is indicated in certain circumstances. Dr Joint talked about treating a patient for an STI and having it come back, maybe concerned for like potentially medication compliance as well. Recurrent vaginitis technically is going to be greater than three episodes documented within one year, but you can always consider referral earlier if this is not a field that you feel comfortable treating with or in place. It doesn't have treatment options for recurrent Imaginators, so the boric acid is not something that's necessarily kept in every. Pharmacy might be from like larger military treatment facilities, probably not extremely readily accessible on the ship as well. So if you don't have the appropriate treatments, feel free to refer. So I'd like this table because it kind of helps break it down in a clear, concise way. So candid ISIS is our yeast infections. These patients are often presenting with that bulvar Paris. So this is externally, they also could have vaginal soreness, irritation, you're Thema both externally as well as on the inside. Often the external erythema just comes from like the excoriations and the physical scratching of the area that makes it irritated. The discharge itself can be white, thick, clumpy cottage cheese like often coating the vaginal walls. You do not have to have all of these kind of hit the descriptive words for all of these in order for it to be a suspicion. Just the cervix should or could appear normal, so not necessarily thinking like punctate or any erythema, or like bleeding from the cervix. Diagnosis for this, this one probably is the most often one that we do treat just based on symptoms and exam because of the classic findings. However, on microscopy you would expect to see Hifi and buds which are like lysed by the potassium hydroxide. In kind of a looks like actually a pretty pattern on microscopy. Treatment for this, like we briefly talked about diflucan A1 time tablet, somewhat making it an easy treatment for patients to take. And then clotrimazole atop of the screen that we can prescribe. Patients can also treat.

Over the counter with like Monistat or miconazole if they are concerned for symptoms as well. Bacterial vaginosis is another extremely common one. Patients complaining of the thin grayish white. Sometimes can be frothy malodorous discharge. This is most often what patients will complain of the reference of, and we'll get a little bit into recurrence in a second. Microscopy, who have a picture of it in a few slides, but you'll see clue cells on the saline wet mount, which are like studded epithelial cells, showing the bacteria on the epithelial cell. The positive with mean test I would not necessarily say is done very often. You can often smell that fishy odor without doing the kaoh onto the drop of the vaginal discharge. Treatment for this first line is to either start with the metro gel, which is placed inside the vagina every day for five days, or to do a tablet orally twice a day for seven days. There's not one that's superior to the other. It can be somewhat up to patient preference. Gel can often be. Difficult to apply and a nuisance to patients. However, sometimes with the oral medication, patients can have like GI distress with it, and if there was any reason that the patient could not get the flagel, you could always consider Clindamycin cream. In terms of the recurrent bacterial vaginosis, like we said, technically 3 documented infections within one year. And I I personally do not go by patient self report of having bacterial vaginosis. I would prefer that this is documented on microscopy. Please. That they did in fact have bacterial vaginosis, just because for recurrent treatments for the amount of medication you're gonna give a patient. It's pretty significant and then the use of boric acid I would say is. Pretty intense. You're our placing an acid inside the vagina. Yes. So there it does not go without risks. A few other forms of vaginitis. That you'll come across, but well, one form and then one less vaginitis, but still one. We'll talk about Trichomonas. Umm, there's one think there's been kind of absent flows of this, I think increasing somewhat more recently about 17% of patients complain of vulvar peritus as well as burning and dysuria some patients will complain of just media and lower abdominal pain. The other portion of these patients, this is completely asymptomatic in terms of the pain, burning, itching and they just notice the change in the discharge. This one you do expect to see that you're Thema of both the vaginal mucosa, the Volvo. As well as attention to that strawberry cervix, this can be malodorous, really thin discharge, ranging from like thin green, yellow, frothy discharge to more purulent discharge. The clinical symptoms are kind of an easy way to diagnose it based on the abnormal discharge. The strawberry cervix. If you do not have the ability to do microscope. Microscopy for trichomonas is kind of fun, though you do see little. Trichomonads swimming around other ways would be the antigen test. If you have lab availability, treatment again is fragile. So kind of one in the same for many, many different vaginitis presentations here. Other options that I have never prescribed and I'm not sure are carried as formulary. Many of our military pharmacies, but to Netezza all and then second is all are both options. I'm always considering dermatitis just as one of the presentations, so looking externally looking for that mild to severe erythema and then looking for. Associated excoriation symptoms and then asking patients if there's been any new soaps, any new laundry detergents, any new types of underwear that have been associated with the presentation of these symptoms. Treating these generally for with low to medium. Potency steroids and then removing the inciting factor that was bothering them. These are just some kind of pictures expressing what we talked about. So the top left showing the yeast infection kind of coding the vaginal walls on the right that contact vulvar dermatitis which that one actually looks pretty severe when you have a dermatitis looks like that. Please consider swapping for yeast as well and that could be like an also patient presentation so. Overweight with lots of fold area for the yeast to grow, consider swapping for yeast on that one. These are the little trichomonads in the bottom right and then bacterial vaginosis. There on the left will show the clue cells. You're not going to have necessarily this fancy staining and fluorescent light, but it does look similar when it's on the normal microscopy. OK. So

next we're going to talk about the menstrual cycle management and the work up for abnormal uterine bleeding, which is probably another extremely common concern that you guys see. So the menstrual cycle is confusing. It is one of those things you read about numerous times and still hard to grasp. A good understanding of kind of the aspects of the menstrual cycle and how the medications you're using to control the cycle. Are working. A menstrual cycle is counted from day one of the menses in one cycle to day one of bleeding in the next cycle. So the average cycle anywhere from 21 to 35 days, the length of the bleed being about 3 days to seven days on average and the heaviness is generally subjective. So I think they use Adcs as like the. Kind of average for a menstrual cycle, but quantifying ADC's is nearly impossible over the course of the menstrual cycle, so it asking patients the heaviness are you passing large clots? Are you using a tampon and a pad? What type of pad are you using it just a ***** liner that can give you an idea of where you expect them to be anemic from their menses. In terms of the cycle length, some patients will say they have irregular cycles really asking patient what they mean by irregular. If they say one month it's 24 days, the next month it's 28 days. I would not say that that's clinically significant. If a patient has a cycle that's 21 days one cycle and the next one is 35 days. I would say that is a larger variation. And put meet criteria for irregular cycles. Other things to ask these patients is. What bothers them about their menstrual cycle and what kind of other goals of their bleeding pattern some patients really do not like the idea of being amenorrheic or without amenities throughout the year? Are they patient that wants a monthly monthly period? Are they somebody that is fine with it being every three months? And then how do they feel about things breakthrough bleeding if we were to help, try and regulate their cycles? Other things in talking to patients is asking them. About pain associated with the cycles. Are they somebody that is debilitated and cannot go to work, cannot get up? Has associated nausea vomiting? If this is a big? Pull for them. We have different birth control options that could be beneficial and then asking them about the feasibility of a contraceptive or a menstrual cycle control method that they can use. So can they take a pill every day? Do they have contraindications to pill? Are they somebody that cannot remember a pill? And whether they'd be agreeable to something that's implanted in their body that they don't have to worry about taking it every day. It's. So a few different ways to optimize the menstrual cycle. I know the most common one, probably the most loved by I want to speak for all OBGYN, but probably most love that leave owner destroid. This is also the main IID which has been approved for heavy menstrual bleeding as well. This medication is progesterone only. It is a long acting reversible contraceptive that is placed in the clinic by a licensed provider. Previously, ID was only approved for five years for contraception and later studies showed that it was helpful for abnormal uterine bleeding. Since then, it's also one of the things we use most often to help control abnormal uterine bleeding. I'm currently it has been expanded to 7 years FDA and now eight years evidence is showing that it's affected for contraceptive. By six months, general. Generally, will tell patients that about 40% of patients should expect to have amenorrhea and about 30 to 40% of patients should have lighter bleeding by that time. Which is can be very beneficial to people about 20 to 30% of people will maintain to have the same type of cycle they did have previously. Similar effects are seen with the kyleena IUD. However, it's not one that we say you have abnormal bleeding. Let's give you a kyleena just because there's stronger evidence for the Marina IUD. Other options would be combined to hormonal contraceptive or the daily pill, or the commonly known birth control pill. This can be used as a mainstay treatment to regulate the menstrual cycle. Both the frequency and the amount. These can also be used in a monthly pattern, so having a patient take the kind of two different colors of the pill continue to take the one with the medication and then take the one that's a different color or usually the iron pills or. Let's forget expect to get tremendous. You can also take in a continuous

fashion, so as soon as you finish your three weeks of the pill that has medication in it, throw out the rest of the pack. So throughout that last week and then start the new pack. With that type of continuous method, I do tell patients that they could have breakthrough bleeding other options that I and my practice not use as frequently, but they do have three month formulations which somewhat use that continuous fashion and then have it anticipated period after three months with a thought that this would decrease the amount of breakthrough bleeding. Generally, birth control pills can lighten as well as shorten the duration of the menses, which can be helpful for patients. We'll discuss later a little bit more about this. Depo Provera or medroxyprogesterone acetate is an IM injection done every 10 to 13 weeks. This does have a high rate of amenorrhea. It's a nice in between between patients that do not want to take a pill every day, do not want to change a ring every day or sorry change a ring out throughout the month or for patients that are not interested in having invasive device placed. This is a nice in between. However, it is not recommended for patients that are like I think I want to get pregnant next year. But I need to use some birth control in the meantime. There is concern that there can be a delayed return to fertility after getting this injection, especially because once you get the injection, you do have about 3 months of birth control, and then there's a little bit of a delayed window after that as well. Some more other options for patients, the etonogestrel implant or the nexplanon, previously known as the implanon. However, I think many of us now have never seen the implanon. This is a subdermal device. It is effective for four to five years now. Previously, when created, it was only effective for three years. It is probably our most effective form of birth control and has well, I described to patient. Sometimes one of the least desirable side effects, because patients often complain of irregular bleeding. But these rates again are variable. So some patients with the next one have absolutely no bleeding and others have pretty unscheduled bothersome bleeding that occurs for two days then not for seven, then for four. There's really no way to predict these prior to use. Another medication is called tranexamic acid or Lestidae. It is an oral nonhormonal formulation is really good for patients that have contraindications for hormones, which will go over in a second, however, is contraindicated in patients with the prior history of thrombo embolism, and it's also contraindicated to use in combination with birth control pills due to concerns for thrombo embolism. And said it's probably one of our most basic that can help optimize the menstrual cycle. These are given three times a day for three to five days. Umm can potentially even give it longer. Do recommend if the patient has predictable periods starting these a day or two prior to the anticipated start of their mentees, and this can down regulate prostaglandin production. It can be a nice alternative to or an addition to contraception. If somebody still has painful or heavy periods. Two forms that are not recommended for optimizing the menstrual cycle would be a copper IUD or progesterone only pills. So how do we even define abnormal uterine bleeding? Patients may say they have abnormal bleeding, but not necessarily. Meet criteria. So if they're not falling outside of what we said was in that normal menstrual cycle, it might not fit and then interfering with the quality of life. If patients say they don't want to period at all, and they think that that is abnormal, that they bleed for three days every 28 days, I would try and counsel patients that that is a normal pattern of bleeding. However, we acknowledge that their menses are still bothersome to them and we do have. Forms of contraception that can help to reduce their amount of bleeding. One thing that's important if a patient is falling into this definition of abnormal uterine bleeding, it's just classify the different causes of bleeding. So it should be in non pregnant women. So I would encourage you if you do have a patient that's coming in with irregular bleeding Edgar and pregnancy test is a very, very good place to start to rule out pregnancy as your treatment is going to be different for a pregnant woman as it is for a non pregnant woman. We use the Palm Cohen kind of acronym to help us think

about the different forms of bleeding, so the P being polyps, that a being adenomyosis, the L being lion, myoma, or fibroids. The C being Coagulopathy ovulatory dysfunction, E is endometrial causes. I is iatrogenic and then the N is not otherwise specified. There's a nice little model online. You just Google Paul Cohen. That kind of breaks it all down for you as well. Labs obtained, like we said here in pregnancy test, is a great place to start and then thinking about whether the patient is in mimic, so getting the complete blood count and iron panel kind of most importantly a ferritin, if you do not have the ability to do an iron panel. Initially that is fine, you can just look to see on the CC if they are microcytic anemia and then considering STI testing. So, gonorrhea, Chlamydia and Trichomonas being the most common for abnormal bleeding, but also offering patients a full STI screen. Umm. Thyroid stimulating hormone is another one. So hypothyroidism and hyperthyroidism can cause irregular cycles. So checking this, if you have the availability or if the patient has other symptoms concerning for thyroid dysfunction in terms of anemia, considering the ideology, so could it just be is iron deficiency is nutritional probably less likely than the nutritional in our population. And then considering whether this is a cute. Or a chronic loss. So as it's been this patient have really large fibroids. Has this been going on for a while as she had heavy bleeding for years and then considering those other causes of anemia? Umm, like production or consumption issues that are probably less managed by an OBGYN and then determining whether this patient needs routine or emergency referral. If they are shortness of breath, chest pain, having really heavy bleeding that is obviously more emergency referral if they are 23 year old with irregular cycles that is bothersome to them. I would say that's less urgent. Referral is indicated again after you begin initial work up. So if you were able to start getting labs that can be beneficial for the specialist and then considering 9 non gynecological etiologies so. Is this your regular bleeding due to hemorrhoids? Making sure you're asking those other associated questions? Some patients will, the biopsy indicated maybe less so. And our active duty population that's out in the fleet as many of these patients are under the age of 30. Or sorry are under the age of 40, but patients over the age of 45 without risk factors and having a presentation of your abnormal bleeding do need a biopsy. Patients that are less than 45 with risk factors. We use the acronym Honda which things today of hypertension, obesity have they had babies before, do they have diabetes and then do they have irregular menses use most often will actually biopsy more people. Umm. Then kind of ACOG or or college recommends just because it can be a simple procedure to help us rule out or decrease the chance of. Uh. Missing, and and Demetrio cancer. So abnormal uterine bleeding. Initial treatment, we briefly talked about and said as well as training statement acid. I'm not sure if this is available at all pharmacies, but if it is, it's a good starting medication and then initiating some form of contraception for menstrual control. So if you are qualified to place an IUD, then that can be a good start. Or combine come hormonal contraceptive as well or like a depo Provera. That's again making sure you're not using the birth. The combined birth control pills with the tranexamic acid. Contraceptive related causes of abnormal bleeding are kind of a a common concern, so if a patient has had their long acting reversible contraceptive in place for less than three months, I would not say that these patients should have it removed. I do encourage these patients to wait about six months to determine what their bleeding pattern actually will be. For patients that have had the Larkin Place for greater than six months, three months or six months, I would say do consider a specialist referral. If they do not have contraindications to estrogen. So say they have. The Marina IUD in place. It's been six months. There's still having bothersome. Bleeding symptoms. You can always add a combined hormonal contraceptive or just a straight estrogen because you do have progesterone protection of the endometrium from the ID. However, if you're patient. Does have contract indications to estrogen considering msid course, or TXAA? And then referral is indicated if really concerning causes

are ruled out and I tried like started a trial. One of these treatments. So urinary tract infections, this is probably more managed by primary care providers, but still something that comes across in our OBGYN clinics. So acute symbols of status, this is your. Bread and butter, UTI patients complaining of discomfort with urination frequency urgency. Maybe some super pubic discomfort. Occasionally hematuria, although not often. Are you gonna see bright red? Blood from the bladder without any systemic symptoms concerning for an upper urinary tract infection. One of these above symptoms does make the diagnosis likely, however, two or more country drastically increases the likelihood that it is an acute simple cystitis for these patients. Please get a urinalysis as well as a urine culture. Many places can just do the urinalysis microscopy with reflex to culture of indicated. And then considering an evaluation for pile and afridis. So checking for CVA tenderness if the patient does also present with. Vaginitis symptoms considering the pelvic exam as well, just to rule out another cause for their discomfort. For acute complicated UTI, so these are your classic systemic symptoms. Suggesting extension of the infection beyond the bladder so fevers, chills, significant fatigue, tiredness and then flank pain or costovertebral angle tenderness. Mr just a quick chart to help break it down, so if somebody does have a suspected cystitis then determining whether they have futures concerning for acute complicated UCI. If they do manage this as an acute complicated UTI so. If you are new to your facility and don't quite know the flow of how things work, or if you have like a physician supervisor, discuss it with either your physician supervisor or your senior medical officer and then not being hesitant to also reach out to family medicine if you're a non specialty trained GMO. I know in every kuni I feel like a patient needed an admission for their acute complicated UTI. This would be done. Through the on call family medicine provider or PA, that then helped coordinate that patient to go to the host nation facility because we did not have it inpatient ward for treatment. If there are not concerning features for acute, complicated UCI, determining whether they're risk factors for multi drug resistant infection. With those kind of criteria being below, if there is concern for a drug resistant infection, obtaining the culture prior to treatment. Can be helpful to like avoid additional resistance or treating with Mac. Sorry not Mac. Yeah, but nature of your tone. In 100 milligrams VID for five days or fosfomycin just a one time dose. If there are not any risk factors for multidrug resistant infection, you can go ahead and start antibiotic therapy without first obtaining a culture. However, I would recommend having obviously obtained the urine prior so you can still send it for culture. You still have to wait for the results again with regimens listed there. Contraception, so everybody is probably everybody's favorite. This chart and many other charts can be really helpful for patients to look at the efficacy of their contraceptive methods. So just showing patients how ineffective some of the common methods are and then suggesting that they use a more effective method if they are not interested in childbearing. So that in effective methods fertility awareness method that can be fine for patients that have really. Regular, predictable Menzies. But being aware that things can change the menstrual cycle as well, that would be one of our least effective methods besides the. Yes, yes. So withdrawal method is also pretty low on the totem pole. Other options male condom, female condoms. I would say I have never personally counseled a patient on using female condoms or or using a cervical sponges. If you can recommend other, more efficacious forms of birth control, I would do so. With male condoms. Or other forms of condoms being essential for sexually transmitted infection prevention. More. Kind of higher efficacy options that are still not our LARC methods would be like the depot Provera the combined birth control pills, the patches, rings and diaphragms. Diaphragms do require fitting and are probably one of our least commonly used forms of the most effective reversible contraceptive methods being the implant or the nexplanon, which is. More efficacious than sterilization and then the intrauterine device. Both the Levin or gestural and the copper

IUD are highly recommended. This app is a both of these apps, I would say are musts if you're treating female service members. So the CDC app here helps you look up different contraindications for a variety of health conditions with regard to different types of contraception. So if you have a patient that has a liver adenoma and you're like, what can I not use for this patient, you can put that in there. If a patient has. The history of epilepsy. It'll give you different categories. Of kind of safety, which will go into in a second, this decide and be ready app I would say is something that it's very easy to put this QR code in the front of your clinic and you're waiting room. This lets patients kind of scroll through the different options of birth control and decide what's most important to them. So are they most concerned with side effects that can see what side effects would be expected with medications? Are they most concerned with irregular bleeding? Did they just want the most effective form of birth control? It's a very, very patient friendly app as well. So these are the criteria that we talked about. So you would type in your patients comorbidities and then it can come up with a chart that says this one's category one or this one's category three, category one, meaning no restriction for the use of the contraceptive method. And then category 3 generally are starting to think to not use this one. The risks are outweighed the advantages, category 4 being a complete unacceptable. Health risk. So contraception, birth control in the media and kind of. Around is. People have the stigma that it's contraception, but contraception is used for way more than just preventing pregnancy. It has multiple benefits to include lighter menses, especially the use of progesterone helping to thin and then protect that uterine lining. It can also suppress the menstrual cycle, so increasing the interval between monties and decreasing the bleeding as well as suppress endometriosis. So these patients that have extremely painful periods birth control pills can be helpful or other forms of birth control to help decrease the associated pain as well. As the heaviness of bleeding episodes. They can also be used to treat like PMS or PMDD, again by suppressing ovulation and then can be used to help with androgenic symptoms. So for patients that have abnormal facial hair growth and acne, the birth control pills increase sex hormone binding globulin, which over time approximately six months can help reduce those androgenic symptoms. So breaking it down by kind of timing of use, what's easiest for your patients or your pills are something that you have to use daily and this goes along with the efficacy of them. The patch is something you change weekly. The ring being monthly and then as we progressed down to the other forms of larks that have. A longer lasting times, but I do require expert placement. So contrary indications to combined hormonal contraceptive pills or short acting reversible contraceptive, which I wouldn't say write SARC in any of your notes. I don't think it's an approved, approved approved abbreviation, but we used it here just for. Being succinct, these things would be uncontrolled hypertension. Even a patient that doesn't have uncontrolled hypertension. So if somebody is like persistently one 40s over 90s, I would say there are other forms of birth control that are better to use migraine with localizing their logical symptoms like aura, this is concerning. Because all these are concerning for increased risk of thromboembolism smoking. This specifically is saying greater than 15 cigarettes a day, it women over the age of 35, or if you're less than 21 days postpartum, I would say better safety to just say any smoking over the age of 20 of 35, I would say combined hormonal contraceptives are not the best for them. Because you don't know if that patient is going to increase their amount of smoking. It's a patient has multiple risk factors for. Cardiovascular disease that probably go along with like obesity as well and high blood pressure. They might be meeting some of these other criteria valvular disease, peripartum cardiomyopathy, history of lupus, breast cancer, coronary artery disease and then diabetes with evidence of vascular disease, severe cirrhosis or hepatitis and then liver adenoma is also another one. That's a contraindication. This is just another way. Sorry to determine if the patient has contraindication to

estrogens. These are questions that could easily be on like a little pamphlet that you hand out prior to evaluating your patient for contraceptive desires. I know in our pink clinic, which is our previously was our walk-in contraceptive clinic which will now be changing to WIX which is makes more sense in terms of a term walk-in contraceptive services. We do give this out to every single patient to screen for contraindications to estrogens. Next line, thanks. So more about combined hormonal contraceptives. This is a combination of estrogen and progesterone. The estrogen being ethanol, estradiol coming in different doses ranging from 10 micrograms up to 35 micrograms. The progestin is the medication that varies in combined hormonal contraceptives. So there's like. Numerous, numerous different types of progestins that you can look up that come in birth controls. These come in monophasic or multiphasic. Tablets, meaning the dose changes throughout the month. Monophasic is probably most recommended at his is kind of more stable steady state for the patient throughout the month. However, multiphasic is not necessarily the wrong answer. The mechanism action so it does prevent that mid cycle LH surge that you saw on the menstrual cycle chart, thereby suppressing ovulation and also prevents the development of the focal in that initial part of the cycle. A patient that uses it perfectly, it's about 99% effective. However typical use is about 91% effective. So that's either missing a pill, taking a pill a few hours late things of that sort. The downsize is something that does have to be taken daily and often. Interactive Duty service members, busy lifestyles taking a pill at the same time every day can be difficult. As well as making sure patients have refills while they're deployed, so there's no lapse in their book control. Other indications like we talked about. So for heavy menstrual bleeding, PMDD or PMS and then her Sikhism or those androgens symptoms, the benefits of birth control pills would be the less acne or hair growth and then menstrual regularity. These patients do have a rapid return to fertility unlike the Depo Provera. There's also been some evidence of decreased endometrial cancer, ovarian cancer, and colorectal cancer. There's some. Uh studies recently saying that there might be increased risk for breast cancer. However, I would say that there's more to come on this. Again, do not use if there's any contradiction to estrogen, this is increased risk for venous thrombosis, embolism, stroke, MI, and other sorts of thrombosis. The patch is one that probably is not one of our most fused by active duty members, but it does also have a combined progesterone and estrogen component. It again works by suppressing ovulation that through the estrogen component and then increasing cervical mucus viscosity and thinning the endometrial lining. Those are done with the progesterone component, this medication. Bypasses the GI tract, unlike your combined or hormonal contraceptive, it's effectiveness is the same as the birth control pills, but requires only weekly dosing. Indications and years, it's mostly just used for contraception. I would not say this is a medication that we used to help control somebody's heavy menstrual bleeding. The benefits? It's convenient, it's rapidly reversible, and then it reaches therapeutic levels rapidly, peaking within 24 hours. However, I would say if you are starting a patient on this, still telling them to use the backup method for at least seven days. Again, do not use if there's a contraindication to estrogen and then counsel patients on some side effects that I guess you could have some of these with the birth control pills as well-being the breast. Dems headache, nausea and then skin changes at the site of the patch placement. Vaginal rings probably are, I would say go through phases of whether they are popular patients or less popular. There are two forms, the Nuva ring being the one that's been around for longer that gets replaced every month and then the Anno Thera, which is one of the newer forms that is last up to a year. So it suppresses ovulation increases or you viscosity and then thins endometrial lining perfect uses about 99% typical use speaking about 91% that being if somebody forgets to place it back in. Most often, the dosing the Nuva ring is every leave it in for 21 days. Take it out for seven and then insert a new ring. The ANOVA Vera is I guess we could say maybe more

environmentally friendly. 21 days in. Take it out for seven at during that time. Clean it, put it in carrier container and then reinsert the same ring for the next 21 days. And having patients do this for up to 13 cycles. Again, this is mostly used for contraceptive benefit. However, some patients could use it for a dysmenorrhea or heavy menstrual bleeding, although it's a it's not first line treatment for heavy menstrual bleeding. The benefits is there's less estrogenic side effects on hemostasis and lipids and maybe the combined oral contraceptives. In terms of patient use, really counseling them that the NuvaRing can be removed for three hours and reinserted for 20 within that 24 hour period. Whereas the innovaro can only be removed for two hours, so many patients will remove the ring for intercourse and then place it back in. It's just making sure that the device does get placed back in and then same risks as estrogen pills and patches. So progesterone only pills. It's not our favorite or most reliable, but if a patient did have contraindications to estrogens and did not want to do a lark method, then these are acceptable options. So norethindrone progressor only pill, mini pill micronor all the same term for the medication. It inhibits this LH surge. However, it does not consistently suppress ovulation. It does do the same by increasing the thickness of cervical mucus and thinning the endometrium as the other pills. However, this one is the last ideal to suppress ovulation, I would say our most common time to use this pill. Is postpartum and patients that want to take pills avoiding the estrogen component in a postpartum patient to help reduce any chance for decreasing breast milk supply as well as decreasing the risk for VTE in comparison to combined pills. This is something that has to be taken daily and then it cannot be missed within 3 hours from a scheduled dose. So it's a pretty tight schedule. Again, this is mostly contraceptive. Use less so for dismembering or heavy bleeding and then again rapid return to fertility state for breastfeeding. There is no estrogen component, so not the same contraindications as the other one, but still thinking about things like lupus breast cancer. Liver cirrhosis, bariatric surgery being a different one and that's due to the absorption of the pill and then a patient that is unreliable pill taker. This is not their best option. So this injectable depot Provera that top part should say injectable overview, not vaginal ring overview, but there are two types, the top one being the one that we used most often. It's 150 milligrams of depot medroxyprogesterone acetate. This is an IM injection either in the glute or the deltoid. It works by preventing ovulation and suppressing FSH. And LH also thickening that cervical mucus. Perfect use so making sure you get there within the 10 to 13 weeks 99% effective typical use more like 94% effective. So that would be patients missing that window contraindications it's good for patients that do have contraindications to asuragen. It's. And can reduce bleeding associated with fibroids, although I would say that's not what we use it for necessarily in practice. The benefits is that it does not affect the breast milk supply much like. The progesterone only pills and about 40 to 50% have amenorrhea one year after. Some issues that have come up with Depo Provera for patients would be. Lou changes and then increased appetite and weight gain about £5 per year. There is an FDA black box warning that talks about reversible bone mineral density loss, so you may have a patient come to you that says I've been on Depo Provera for two years and now they said I'm not allowed to be on it anymore because of the bone mineral density loss. I would say talk to the patient about that build. Don't you loss, encourage them to do weight bearing activities. Discuss with them if they're interested in another form of birth control, but you do not necessarily have to take them off of it. Because of this FDA black box warning as soon as they come off the medication, they do have a reversible. Gain or a reversible loss. So we'll start to gain that bone mineral density back. Contraindications would be as listed here, so malignancy, blood clot, cerebral vascular disease. Lark. So many of our favorites. Long acting reversible contraceptive, this must be placed by health care provider who has been trained and placement of that specific form of contraception. So not all Iuds are created equal. If any of you have

placed the paragard versus the Marina. Some are more user friendly than others. The Paragard is a finicky little device that I swear tries to jump on the floor when you take it out of its packaging that is made of copper and has no hormones, and then our hormonal Iuds listed here, all of them having levonorgestrel, different dosages. In the actual device and then releasing different amount over time, all all very effective and then the next one on which is each norgestrel. So another form of progesterone. It's FDA approved versus it's evidence based are different. So we are currently changing out next bonds every five years in our clinic due to the evidence for efficacy. So this is a little copper IUD. You came and see that the copper on the device itself, it's copper wire coiled around that shaped plastic frame. This is MRI safe. If you have moved to the new medical record and you do place an IUD. The one benefit to our medical record is now that you can see whether a patient has an implant or not. So under histories, you're familiar with Genesis, there is a little tab for implants and placing that in there, noting that it's in the pelvis and then saying that they're MRI safe is beneficial. Umm. The mechanism of action, so this is not like the progesterone IUD. The device itself prevents fertilization and inhibits sperm migration and viability. It is effective with perfect use being greater than 99%. FDA recommends replacing in 10 years, whereas the evidence for efficacy is up to 12 years. It is great for contraception and avoiding exogenous hormones. It's also good for emergency contraception in place up to five days after unprotected intercourse. The benefits is that it's nonhormonal no medication interactions and does not affect breast milk supply. However, counseling patients that they could expect to have heavier, more painful periods. So your patient that comes in with abnormal bleeding, dysmenorrhea, heavy periods, you're concerned friend and nutrioso sis, but she wants birth control. A copper IUD is not your first line medication that you should choose. Think about other options for her. The contraindications are, let's say, probably fewer than others thinking about Wilsons disease or copper allergy. You learn anomalies being all ID's if they're known, and then a patient with active PID or known or suspected pregnancy. The levonorgestrel IUD's, so again progesterone only preventing fertilization. As well as increasing cervical mucus and can potentially prevent ovulation. The years of its replacement depends on its device, again, used very commonly for abnormal bleeding and disk mentoria can also be a good treatment option for a patient with associated endometriosis. And we already talked about its benefits pretty extensively. Next slide, awesome. The next one on so another commonly used one and nice set it. Forget it method. It is the editor gestural which is suppresses ovulation. It is more effective than two bolt sterilization. We are replacing them every five years in our clinic. It is great contraception without with for patients that have a contraindication to estrogen can also be beneficial for patients with disk meneria or endometriosis. This can be seen on ultrasound and X-ray. Which is kind of fun to be able to try and find that if somebody has had a deep insertion, but this does require, like we said, expert placement. Counseling these patients on a regular beading patterns up to 78 percent, 80% of people will have a regular bleeding. And as we talked about, it's hard to predict which patient will have a regular beading and which will not, and then contraindications. Being active breast cancer, liver disease, PID or known pregnancies. Emergency contraception. This is important for kind of frontline providers to know about as well as a referral to Obi Juan can take quite some time. This could prevent a pregnancy after sexual intercourse. Whether this was intercourse without contraception, whether the condom broke with the patient, missed a dose of contraception, or vomited their dose of oral contraceptive pills. Or sexual assault. The efficacy does vary by type. Like we talked about, Paragard IUD is the most effective, but does require trained provider to place. It can be placed up to five days after intercourse and then does act as a long term contraceptive. However, might not be the best contraceptive method for a patient that has heavy bleeding. And then the pills that we think about. Little personal acetate, which is Ella

Levin, or gestural, which is gonna be Plan B and then combined, estrogen, progesterone. Pills using them in a specific method and regimen like in higher doses and intensity to act as emergency contraceptive. So thinking a little bit about these pills and the benefits, some are easily successive accessible, nonprescription noninvasive, so patient is able to just go to CVS or whatever local pharmacy to request some of these. The downside being that some are less effective with higher BMI. They can cause nausea and they be maybe less effective after three to five days depending on the method. Side effects like we just mentioned, nausea, abdominal pain, breast pain just because of the dose of the hormone. We look presta acetate or Ella is a selective progesterone receptor modulator. This is nice because it could be used up to five days after unprotected intercourse and then you do need to counsel patients to wait to resume their other hormonal birth control for at least five days. The downside is it does require a prescription. Then levonorgestrel, again progesterone, progestin only, it can only be used up to three days after unprotected intercourse. But the benefit being you can start any other birth control immediately after taking it. It is less effective for patients with BMI over 25. Two different brand names probably Plan B being the one we hear of most often, but my way being another. Registered medication. This one does not require prescription and is over the counter at the pharmacy. It is also a walk in method at many of our clinics. The combined estrogen progesterone method I would say probably is less used unless the patient is already on birth control pills and just missed certain dose pill or vomited at the pill. It is higher doses and the regimen differs by which type of pill the patient is on. Uh-huh. Again, less effective for higher BMI and the patient must have had a prior prescription or new prescription for these combined hormonal contraceptives. Pelvic pain. Again, very common. Chief complaint for patients so. Really getting a thorough history for the pain when it started. What makes it worse? What makes it better describing the quality of the pain? Is it burning? Is it sharp? Figuring out if there's any other associated symptoms like nausea, vomiting, change and discharge? In terms of thinking about what makes it worse, what makes it better? Often these patients will be complaining of dyspareunia, or pain related to intercourse. Not being nervous to ask them if this is paid within insertion pain with deep penetration, pain with any gem built, touching. Asking these questions in a straightforward manner can make the patient feel like they are empowered to describe their symptoms to you. And then also figuring out if there's any relation to the menses. So if they have worsening of pain in the first few days after their mentees, that might give you kind of insight as to what to treat them for and then making sure you're asking about abnormal discharge so. If there are starting to notice foul odor, yellowish, thicker discharge being more concerned for STI's, potentially PID, and then getting a thorough gynecological history as well, like an STI history. So pelvic pain. There's a cute definition, which is it's only been lasting less than six months or going on more chronically. This is the perception of pain. The pelvis, due to a variety of causes, whether it's inflammatory, infectious or traumatic injury, that's affecting the well-being and activities of daily life. Really thinking about a broad differential diagnosis is helpful so often with patients complain of pelvic pain, the thought is. Gynecologic ideology must be Gwyn. It must be the uterus. It must be the ovaries. But continuing to think about other things. So yes, client gynecology can be one of the top things you think about. Uh, now myosis masses. Pelvic inflammatory disease. Could this be a fibroid? Could it be an atopic pregnancy but not ruling out other things that are common, so gastrointestinal issues like inflammatory bowel disease or just irritable bowel syndrome? You're a logical things like urinary tract infection and interstitial cystitis. And then patients that have neuromuscular issues. So prior trauma. Muscular injury, exceptional wall? Or is this just an abdominal migraine and then thinking about psychological impacts to differential diagnosis? So is this a physical manifestation of their depression anxiety? Again, this list is not all inclusive. There's probably at least

fifty more things that could be added to the differential, but this is a good place to start. Again, breaking it down a little bit more as it's somewhat repetitive from the last slide, but thinking about your evaluation really doing a thorough history and then I would say for these patients, if they're willing to pelvic exam, can be helpful to see if there's anything physically on examination that could be contributing. So do they have abnormal discharge? Is there a mask that you can tell Pete? I'm getting kind of a A baseline exam and seeing if there's any physical thing that is seen. You're in pregnancy test that helps you rule out topic pregnancy and then considering sexually transmitted infection testing. Imaging transvaginal ultrasound can be helpful to evaluate for those adnexal masses or uterine masses that shoot can't necessarily palpate on exam. Although I know that imaging is not accessible to all providers in terms of. Treatment at trial and says if there are no contraindications, it's a really good start and then thinking about types of birth control for cycle regulation. If there are other causes treating those causes so Constipation, urinary tract infection, etcetera. All very helpful to treat as well and then ruling out emergency so. Of acute pain, thinking about things like ovarian torsion. What does patients are often present with? Nausea, vomiting, intense pain like crawling around in the bed, think like kidney stone presentation and then cervical motion. Tenderness please. Patients shave low threshold to treat empirically for PID. Pelvic masses we briefed a little bit on this one in the last slide. So yes, some of these are gonna find on your by manual exam, but that's usually if they're only pretty large. Usually they are found on imaging, so transvaginal ultrasound being the best way for us to look at ovarian masses. These patients that get these ultrasounds often will presented with acute or in intermittent pelvic or abdominal pain. It's concerning ultrasound findings would be if you have a large size greater than 10 centimeters. If there are papillary or solid components irregularities besides or like high vascular flow, all those are concerning for malignancy. Me. The ultrasound is also helpful to. Not necessarily rule out, but help decrease your likelihood of ovarian torsion. So if there's good flow to the ovaries on transvaginal ultrasound, you're less suspicious for ovarian torsion. But that does not mean that it's not intermittently flipping back and forth. If you have any of these concerning ultrasound findings considering tumor markers based on patient's age for this, I would recommend consulting with an OBGYN before ordering things is because. Things such as CA 125 are less helpful in the younger population because there are other things that can cause an elevated CR125, so it's safe for that. Do not hesitate to reach out to OBGYN to ask what is best to order and then management again. This is going to be based on patients age as well as family history in terms of when they need their next ultrasound to follow up. If they need imminent surgery. The the basic goal of any of this evaluation management is to exclude malignancy. OK. You're never wrong to place a referral to OB GYN for Eddie Mass to be presumed of gynecologic origin. I would say caveat with this if they have like a one to two centimeter fibroid, it's probably not the cause of their symptoms, but ovarian masses for sure feel free to send to OB, Joanne. This is kind of our bread and butter, like Obi Juan board question of your differential diagnosis for an ovarian mass. So thinking of an easy way for yourself to break it down between gynecologic and non gynecologic origins and thinking about those benign. Causes versus the malignant causes. By no means do you need to memorize this table. Just being able to bring it up or think of some of these possibilities. Infertility diagnosis and ovulation. This is kind of important for us to be able to discuss with patients to describe what actually meets the criteria for infertility. So diagnosis really does depend on age, so less than the age of 35, the failure to achieve pregnancy after 12 months of regular unprotected intercourse. Is the definition for infertility, whereas over the age of 35 it is only six months. I'm really asking patients what their intercourse cycle is, so a lot of patients that we've had will say, I've been having difficulty getting pregnant for the last 12 months. When you asked them further questions and their partner is stationed

across the US. So with that being said, there's obviously not regular unprotected intercourse if there's a geographic separation of the two partners. In terms of history, thinking about other. I think getting a thorough menstrual and gynecologic history is helpful, so figuring out when they first had their periods, when their last on was looking at their cycle regularity and then thinking if they have any instrumental or post coital spotting. Also, asking these patients if they're partner has ever had. Conceived a child before and then thinking about more PCOS symptoms to the hirsutism or acne, which would go along with irregular cycles. There are multiple causes of infertility, but often there's no clear diagnosis given, so thinking about things like polycystic ovarian syndrome, thyroid dysfunction, hyperprolactinemia, and then uterine anomalies, a good way to kind of start out prior to sending somebody to OBGYN. At least getting the work up started. The patient also feels like you're doing something for them. Would be getting a TSH a hemoglobin A1C to help think of this. Patient does have other risk factors for diabetes. Assuming analysis, obviously with consent of the other partner and then prolactin ordered for a patient with irregular menses, the prolactin is something that is a little bit trickier. So having the counseling patient that if you're ordering prolactin that they need to go in the morning fasting, not having showered beforehand and not having had ****** stimulation. Can help prevent that prolactin from being elevated? We've had many times where we're sent to patient that had elevated prolactin. But the patient went to the lab at 3:00 PM after having done a workout or something of that sort, so that could be the reason for the prolactin being elevated. If it is initially elevated and stay, they did go at 10:00 AM or something of that sort. Having them repeat it and following the strict criteria in the morning can be helpful. Early pregnancy management. This is just going to focus on oh, sorry, I got confused to what slides were in order. So this is about emergency pregnancy situations. So thinking about different types of abortion, like threatened abortion, which is an early pregnancy inside the uterus with active vaginal bleeding and a closed cervical OSS, there's inevitable abortion in which there's an early pregnancy that the cervical OS is open. And that's just found on physical exam with the speculum. Incomplete abortion would be vaginal bleeding with partial passage of products and then a septic abortion. It's an infected uterus in pregnancy less than 20 weeks. This should say ectopic pregnancy, but it's a pregnancy outside of the uterus. Most often these are presenting in the flocking tube about 96% of the times, and then the more rare things would be cervical interstitial cornual, not corneal cesarean scar. Intramural ovarian or abdominal. Again, these other ones are rare, but definitely still things to think about. Heterotopic is multiple gestations, so you do have one entry eater and pregnancy. And then one extra uterine pregnancy. Those are often more difficult to manage, especially in a patient that would like to keep the intruder and pregnancy. However, the extruder and pregnancy could be life threatening. In how to treat these patients, you really should be evaluating for whether they are stable. So evaluating for hemodynamic instability, if there is any form of hemodynamic instability, transferring them to higher level of care immediately. And then also asking these patients the quality of their vaginal bleeding, how long it's been going on, if they have associated fever, which can be concerning for septic. Septic abortion and then asking about pelvic or abdominal pain if they have nausea and vomiting as well. This can be normal in early pregnancy, but also considering whether there's a risk for ovarian torsion, like if they had a really large ovarian mass as well, and then ruling out other things like pile and Freitas nephrolithiasis. Or just plain UTI with dysuria. An evaluation of an ectopic pregnancy. The urine HCG is gonna be most helpful. One to just tell you the patient is pregnant with that is not the only thing. You need a serum. Quantitative HCG is helpful to determine kind of what expectations we have to see on ultrasound. This can become very complicated with like a discriminatory zone of HCG levels and which we anticipate to see something inside the uterus after that discriminatory zone, but just obtaining HCG to have a baseline

information is helpful. Evaluating other things like the urine, CBC as well as history STI testing and then getting their blood type, which is important. Thing that we'll we'll touch on later, but basically these patients, if they are negative, do require Rhogam to prevent our immunization. Imaging the translation ultrasound again is our go to for most things and OBGYN that's going to completely evaluate the uterus as well as the ad next to look for masses. Some people are trained in abdominal ultrasounds like a fast exam instead of pelvic ultrasounds. This is not necessarily this is not diagnostic for the pregnancy unless you. Fully see the gestational SAC, yolk SAC and embryo in the uterus on abdominal ultrasound. However, I don't think that's necessarily going to happen, but the fast exam looking for free fluid in abdomen can be helpful if you are qualified and then transvaginal ultrasound again one if it's available, and two, if you have a provider qualified to do it. For ectopics, I would say ectopic until proven otherwise, as this can be a life threatening emergency. The criteria for an act topic basically, if you do not see a gestational sack or yolk SAC in the uterus, then you're still concerned. Correct topic. Your concern or suspicion can be based on the amount of pain as well as vaginal bleeding. Some of these patients may have no bleeding to slight spotting to pretty heavy bleeding, so I would say vaginal bleeding is not necessarily what to go off of. Just can help determine the stability of the hemodynamic stability of the patient at that point in time. And then if the patient has any sort of inappropriate rise or fall in the HCG values, that can be concerning. So again, that is probably more complicated, but looking at generally we predict a doubling within the 48 hours, but. But probably full, another lecture would be needed to go into that a little bit more. As for a miscarriage, this is just a generic catch all terms for all types of abortion. We briefly talked about some of them, but generally thought of as a loss of prior fetal cardiac activity or inappropriate timeline of the developmental structures of fetal ultrasound and fetal structures on ultrasound or inappropriate change HG values. All to meet concerning for miscarriage. This is again one of our probably most relied on charts both with radiology and then with OBGYN to help us. Look at the findings that are diagnostic of pregnancy failure. So nothing you have to memorize here. But this is often why we bring patients back for ultrasound in 11 days or 14 days rather than seeing them every single week because it lets us give them a clear answer rather than a vague answer. In terms of management, so ectopic pregnancies do need to be emergently transferred to patient to place that has gynecologic surgery as an option. Yes. In other parts of the world, there is expectant management that is performed. However, this is not routine in the US, methotrexate is given as an IM injection. It does require a work up prior of evaluating the CBC as well as liver and kidney function, and does have some contraindications. This does require continued monitoring as well as the ability to perform surgeries should the patient decompensate or then have a ruptured at topic surgical option self inject any versus salpingo ostomy are two surgeries that can be performed to resolve that topic. In terms of miscarriage management, that's depends on patient preference, provider skills and local resources. There are three different management types, so expectant management is the watch and wait method which can take about approximate up to 8 weeks for tissue to pass on its own medical management. Either misoprostol or myth of christone, or a combination of them, should the clinic be able to provide me with a price stone? There's been improved successes with the dual treatment. This can be a 24 to 48 hours for patients to pass that normal tissue, and important to counsel patients on heavy bleeding and strict return precautions, surgical management being. Either a manual vacuum aspiration completed in the office or a dilation curettage performed in the operating room. This is her definitely appropriate time to consult OBGYN. Unless you are a provider skilled in that treatment method. Early pregnancy, so this might be something common that you all see before the patient is able to get to an OBGYN or a family medicine provider that can provide pregnancy care for a patient so early treatment is important to

prevent progression to more severe condition. So the more dehydrated patient comes becomes the more worse their symptoms are thinking of those first line methods. Encouraging patients to have small, frequent meals and then avoiding kind of triggering foods can be helpful if a patient has worsening of their nausea and vomiting, just the taking their prenatal vitamins. Two different things would be to have the patient take their prenatal vitamin at night time or after breakfast at time when they have food in their stomach or to switch them only to the folic acid supplements. The folic acid is really an important part of the prenatal vitamin. We want them to get anyways. In term, other things would be like trial of ginger capsules. The patient is interested in that. Pharmacological methods previously diclegis with a combined vitamin B6 and doxylamine. Now we have to prescribe them separately as a cost effective method. So if you're able to prescribe these in your facility, that's a safe place to start. Referral is indicated for patients that are having uncontrolled symptoms despite these first sight interventions or concern of. Evidence of dehydration or ketonuria organization already has OB care and place. It is reasonable to refer them to that established OB care. Medical evacuation and medevac for Women's Health related concerns will just briefly touch on this. So indications for medevac. Patients who require escalation of care, these types of things would require inpatient missions so the patient does have pyelonephritis. Especially one in pregnancy, but not necessarily outside of pregnancy. If they're piling arthritis with worsening systemic symptoms, they do require inpatient admission, uncontrolled nausea and vomiting. Any difficulty maintaining airway, if they have like a 2B ovarian Abscess, or an infection requiring prolonged antibiotics. Septic abortion does need surgical management. Where do you send these patients? So if you have a nearby MTF that can support you, that is probably the most reasonable or nearby civilian facility overseas. Looking at those host nation facilities, although being familiar with your host nation facilities and knowing what those facilities will not accept as standards of care may differ between the US standards and host nation standards. And then how to get there depending on patients severity, whether this is privately owned vehicle? Ambulance or air, again, depending on your location. Things that require surgical intervention, appendicitis, ovarian torsion absolutely require higher escalation, and then any patient with hemodynamic instability. Please, please get to the correct location. These are a bunch of references for this section. Again, that CDC app or CDC site is gonna be one of the most helpful for you in terms of kind of the treatment algorithms. OK. Any questions? I'm gonna look back at the. That chat area as well, but does anybody have any other questions? I did have one quick question for you. Yes. Can you hear me? OK. Hi, this is Molly. I'm one of the FST Yeah. doctors here in San Diego. Just a quick question. I actually had to one of them. I put in the chat just a quick. You know, for a yeast infections and BV that are asymptomatic on PAP, do you typically just? Uh, not treat those, or do you? Do you treat those? Yeah. For a non pregnant patient with asymptomatic on path, I Yeah. Again. would say not necessary to treat them. Perfect. OK. I do always communicate it to patients. That way when they look back at their record and they say like I had a yeast infection and nobody told me. Right. It's about symptoms just that way. They've had explained to them that that can be an incidental finding. If it's not causing you symptoms, it's not necessarily gonna cause you harm. OK, perfect. Thank the helps. And then the second question I had for you was I have a a patient that has a father with clotting disorder of some kind, but she hasn't had any genetic testing. She's on mononessa and and loves it. Is that something Umm. that we can consider keeping or does she need to go get, you know, follow on testing or can we just she has no other risk factor. She's you know 27 non-smoker. Yeah. You know, things like that. And that, I presume the father has not had any sort of work up. No, he just got treated for it. So I'm not even sure if it's even a clotting disorder per se. That's kind of what she said. She's having a hard time digging it up, but. Like she was on the I think whether Tricycling low or you

know something along those lines and wanna just switch to a monophasic which we did. And then I kind of thought about what you were saying and wondering if she would necessarily need to switch or it's or not. I don't necessarily think she needs to switch with a family history and know clear like inherited thrombophilia. I would say you don't necessarily need to switch, but making sure that Right. Me. patient is counseled as to like side effects to look for, I Right. And we talked about that. think, yeah, I think that's appropriate. Perfect. Thank you so much. Welcome. Hi, good morning. Lieutenant, I'm Lieutenant Rick and I'm one I. of the PA's. I'm my question for you is so. I know that with Nexplanon, given the high risk of. And irregular, unpredicted bleeding, we often give a combined oral contraceptives to help manage that bleeding. So how long would you recommend trying combined oral contraceptives before giving the body a chance to see if it can kind of regulate the cycles on its own? And if it can't, how long is it safe to continue using the combined oral contraceptives along with the nexplanon? Yeah, that's a good question. I don't think there's like a clear recommendation as to kind of how long do you use either combined hormonal contraceptives in addition to nexplanon versus just an estrogen component. So I think we often go for the combined hormonal contraceptives just because that's what we're most familiar with. But technically, you don't even need that progesterone component either. I would say you're not wrong to try it for one month. You're not wrong to try it for three months. I would say if they're still having irregular bleeding on the dual method after three months, maybe reevaluate. To see if there's something else that they would be interested in, but I don't think there's concise recommendations as to how long for that patient to. Beyond the combined hormonal contraceptives for. Yeah. There's no real significant risks presuming the patient has no contraindications to estrogen therapy. There is no like real risk with them being on like double the dose of contraceptives, I guess. Yeah, the doses I mean, and if anybody else knows this more than me, the doses of pretty low overall. So I would say there's no real risk for them to be on the dual methods. Understood, ma'am. Thank you. Of course. Let's see. I guess a few of the questions here. Any research on menstrual cycle changes since COVID immunization? There has been some evidence in emerging studies that, yes, maybe some menstrual cycle irregularity, but nothing necessarily clinically significant. I think the study I read in ACOG said varying by about 3 days, but not necessarily missing cycles. However, I think in practice I think I've seen more patients report irregular cycles then that study would have suggested. Yes. Other questions asking if the last week has any medication in the combined hormonal contraceptive pills. Yes, they just. They generally are iron pills so can help prevent an or reduce the risk for anemia. But there's no like estrogen or progesterone component. Ohh cool. Somebody answered the question about COVID. And yes, console your local antibiogram when treating UTI's. That is definitely recommended. OK. I don't know a specific Max weight recommended for the patch. Have heard over £200 that this is not the best form of contraception, but I don't think there's like a. That's clear line in the sand where you can or cannot use it. In terms of Plan B over Ella, I don't necessarily think there's the question is, is there a reason why I provider would recommend Plan B over Ella anymore? I think solo like just solely convenience would be the reason that somebody would. Want a patient to get planned B over Ella? Maybe they can't get to pharmacy. They can't get a prescription. It's over the weekend. Something of that sort. Yes, doctor Monroe. More on the 10 killers. Nice to see you. Yeah. Thank you for the lecture. I have a question. I'm calling from submarine writing a squadron 31 in Bangor, WA and we have a lot of IC's who go on submarines. In austere environments. They're underway for two to three months at a time, and a major complaint for the female submariners is vaginitis. I'm wondering if you could discuss more. You talked a little bit about this, but advice we can give those providers for how to clinically diagnose the different kinds of vaginitis and how to manage empiric treatment. And those patients?

Yeah. So in AI, I'm presuming that they do not have any ability to do microscopy or other testing on that remote. Facility. So I would say just kind of going based on symptoms, I would not necessarily say if it treatment, if the symptoms are bothersome to the patient and the patient is describing the yellow, whatever the thick white discharge treating empirically seems extremely reasonable for yeast infection. And then same for bacterial vaginosis. Given the remote location and probably the inability to do a speculum exam, I presume. So I would say empiric treatment when you don't have the ability to do actual testing is reasonable. If the symptoms are bothersome to a patient. Was that? And then presumably if if let's say somebody they have concern for Candidiasis, they treat with fluconazole and then there's resistance or treatment failure, then trying Metronet is all instead. Umm, I think I think that can be reasonable. I think the presentation between bacterial vaginosis and yeast are kind of different in terms of the type of discharge they would explain. You could also try and repeat dose of diflucan or even the recommendation for. Like recurrent would be to do like 3 days of diflucan rather than the one dose. So that could be something they could consider as well. Thank you so much. You're welcome. OK. Yes, there are. There was a question about other causes of PID that are not STI related. So yes, there are lots of polymicrobial infections that can cause PID symptoms that we do not routinely test for, however, could consider testing. I would not say that something that would routinely be tested in an outside facility and then. In terms of the question is what type? What kind of follow up do you need from a psychologist? Frequency. A follow-up type of information. If a patient has pelvic pain and depression, so I would say that initial workup can start with you guys as providers or OBGYN as providers and kind of delving into the onset of symptoms of the pain and then teasing out depressive symptoms. I don't think you're ever wrong to put in a psychology referral for these patients as that expertise in counseling and even asking questions is. Definitely expertise that comes from a psychologist, not necessarily from a PCM, and they can help decide kind of the frequency of follow up needed generally for our pelvic pain patients. That come in with severe pelvic pain. We do basically automatically place a psychology referral as mental health disorders have high association with pelvic pain. And kind of leave it up to the those experts to help tease out what can be done for their depressive or anxiety history. And there's question about breast cancer and still taking antineoplastic agents. Our OCP still safe, I would probably be a bit hesitant and I would talk to their oncologist about kind of recommendations moving forward. So it's not a decision I would make on my own. Wonderful. Any other questions? All right, hearing no other questions, Lieutenant Gillis would just like to say a very big thank you so much for this presentation and for your work developing the content as well. We really appreciate it. So thank you, ma'am. Yeah, thank you, guys. Have a good day. You as well. Ohh great. So just moving on to session three. I'm I'm happy to hand it over to Commander Ellison for a presentation on Women's Health considerations prior to and during deployment. So Commander Allison, over to you, man. Hi, good morning. Can you hear me? Yes, ma'am. We can hear you, alright. So good morning. Cause I'm in Farmington. So the Pacific side. Good afternoon for those folks are on the East Coast. I'm Commander Carolyn Ellison. I'm stationed at Naval Hospital, Bremerton, and I appreciate the opportunity to be able to speak today and just some considerations to think about as you're planning prep and preparing for deployments. And most notably for your female population. Uh, so you'll see my background. And then I have no disclosures. The presentation are of my ideas, not the DoD. You'll see you're learning objectives here. Next line. All right. So everybody's probably aware that deployed environments operational environments are very challenging for your sailors, for your officers, for your medical staff. A lot of women feel in ill prepared when going on these deployments. They feel like they're not well educated and don't really understand how they can prepare this blizzy need to be successful and so a lot of what we'll talk about today is how

you can educate your folks going on deployment and provide expectation management, which goes a long way for reducing stress on a deployment. Some considerations are a lot of times deployments, you have a lack of packing ability and storage space a lot of times we're told. To take a seat bag and that's it. And that's all you got. So if you're planning a 6 to 9 month deployments, how do you pack enough supplies to manage menstrual cycles or other considerations for Women's Health? Uh, what's the resupply of hygiene and supplies that may be available? Are you on a ship where you know, resupply, maybe two to three months? Are you at a location that may have a exchange right nearby? Are gonna ship that has a ship store capability, a lot of osteo remote environments may not have this availability of supplies. And so how do you provide? You know, and and educate people on how to make sure they are prepared for deployment and I'll stereo environments, we're also not well equipped to often to provide acute care comprehensive evaluation. So planning on how you anticipate providing evaluations in those environments is exceptionally important for preparation. So as a medical leader or medical provider, understanding where you're going and for length of time and then knowing what your available resources are important so that you can provide that information to your. Sailors and officers before you head out and ensuring that women are given time to, you know, receive education, making sure that they have opportunities to see their primary care providers. If you're not their primary care provider in advance of going anticipating supplies that you'll need equipment that you'll need medications that you'll need for acute evaluations of situations that may come up. So we'll talk about Mistral education. This is you had a very in depth and and thorough brief just before this. So this is just an overview of what to consider when you're in deployed or operational environments. A lot of people, a lot of women may want to better control their cycles before going on deployment. If they're irregular, they may want to suppress their cycles when going to deployment to reduce burden of them. And so a lot of people may want to consider contraception options to to do that. Uh, good ones are OCP's nuva ring ID and plans Depo Provera patches. You wanna have women start? You start that discussion early so you don't want to wait till the month before deployment for women to start trying to start new contraception options or changing them. This should really take three to six months in advance to make sure that people hopefully can stabilize their cycles to way they wanted or work out any unwanted side effects they have in advance so that they're not having to deal with that on top of other stressors in and deployed our operational environment. So you want to also educate your female sailors that you know menstrual cycles, often changing our deployment stress is a big factor on deployment and and a lot of people who aren't sure might respond. I've never spotted before or all of a sudden my periods are heavier or maybe I didn't have a period before for last year on my next one on, and now I'm starting to have periods again. Is that normal and the create stress. And so if you can provide an opportunity to discuss those common situations that occur on deployment in advance, it reduces stress. On your sailors who often don't come to you early on, they just stress and worry about and talk to their colleagues and their friends about it, you know, and also reduce maybe visits to you, unnecessary visits to you for those issues that are common and expected. And then also telling them when they need to seek care. Like when that does it become a problem, what symptoms that they shouldn't kind of just wait it out and comes to you for all that starts before deployment or an operational environment. Ensure that you have available various options for our, you know, uh contraceptive options during deployment. So having some variety, you wanna try to, even though you're an operational element and you're limited, you want to try to still individualize care for your sailors and officers when you're out there. So making sure that you can, if they have an IUD or a next one, I want to switch it or they're on a monophasic maybe have some try physics available. So you just want to be able to provide some options for them during that time,

depending on how long they're out there. So supply education points, you know, some people don't want to, you know, use contraception options for managing their cycles, right? But they just maybe need to better understand how to prepare to manage their cycles well underway. So what are the options available for them? A lot of people aren't aware of period underwear or cups and disk. And so having that education advance and say maybe try these out, see if they work for you. If you're going to be Ma's often stand watch for 12 hours. So maybe they want to consider use tampons and period underwear. Because you know the worst thing would be to all of a sudden have a a period explosion and being a standing watch, right? So educating them on how they can use what we have available for supplies to manage situations, they will be in our will go a long way understanding with the deployment does it a three month deployment where they can probably just bring all their own supplies. It is 6 to 9 month deployment do they need to set up opportunities for resupply. Having people mail them, you know supplies. Is there a way that you can have a storage space. I'll talk about that later in situations I've been in where, you know, we were able to actually all the females could put their supplies in a storage place because we didn't have it otherwise. Instrumental spies are ordered along with Amal requirements. They're typically not in the e-mail, but it's important to have some available. Some women may even not again not had a period in a year, don't expect to have one surprise on a deployment that starts and they may not have been prepared for that. So having some available is important. Uh, so just, uh, prevention preparation. There was very detailed discussion about these topics and symptoms. We won't go into detail, but some considerations for deployment, a lot of women have experienced these infections or vaginitis infections, urinary tract infections in the past are well aware of the symptoms that occur and are well, well treatment options for them. And so consider or empowering them to do prophylactic management of their symptoms or have that discussion with the primary care provider in advance, consider allowing them to have. Treatments on you know on hand. So if the symptoms start, they can start that treatments at readily available versus trying to wait to be seen to treat again in the hot, you know high up tempo environment. It may take a while to have an opportunity to go see medical and in the meantime they're dealing with these symptoms to be seen and and then they know exactly what it is, when they when they have them. So consider allowing them to carry supplies. We know what the caveat if they're taking antibiotics for UTI or a BV infection, but would be ideal for them to notify their. Premier care provider or the ships dock to let them know that they're on those medications, which may or may not affect or cause side effects that would affect their job, but empowering them to treat themselves for well known situations is an ideal and goes a long way and you know reducing again reducing stress during and deploying environment. Uh, you know, educating again in advance is super important. So in talking to him about how do you avoid, you know, a lot of times they're triggers for these these symptoms. So how do you avoid those for Utis trying to remind them that you need to void regularly? You know, remember, you a lot of times we can't stand long 12 hour duties and they often forget or don't feel like they have time. But it's important that you try to make time for it. Adequate hydration throughout the day and ensure medical has prebiotics available for treatment. We talked about that early in the presentation. But I would recommend making sure you have not just like first line treatment, but a second line treatment that's when mentioned before and you know in your antibiogram there's a lot of antibiotic resistance and so common treatments like macrobid futis may not work for everybody. You may not have access to a previous culture, so making sure you do have alternate therapies available. These infections bacterial infections in the education piece beforehand, encouraging women to have well fitting underwear caught in a Runyon and a lot of more specifics to it. But maybe bringing baby wipes with them especially we're gonna go into a hot

human environment, you know, having a water for purpose, for hygiene if you're not going to have a shower readily available. So those can definitely help with preparation and have again expectation management for the environment that going into goes a long way. A common thing I've seen and I didn't mention it but. You probably the the very situations I've been in is is I've been in Afghanistan a shark trumpet. Soon I've been on ships for humanitarian missions, both Expeditionary and the hospital ship, and then more recently, in a deployed environment. And one thing that I don't think is often talked about before. People go and women aren't, don't maybe have experience to until it happens as well Vitis. So inflammation, you know, the perianal area, the outer vaginal area and this can come from heat. Again a lot of deployments we go into it's a very hot humid environment a lot of spaces on ships can get very hot. And they can trigger this inflammation. Vaginal infections can also cause some inflammation. Friction from uniforms or equipment that need to be aware worn can cause this inflammation. So you wanna encourage well fitting underwear again? Regular changing them anywhere. Make sure you're able to treat those symptoms right. The worst thing would be having to deal with those symptoms that aren't left untreated for an entire day of deployment. So consider making sure that you have all those available as well. And we'll talk a little bit more about the supply preparation too. Alright, supplies and medications. Alright, so uh, deployed environments are you have limited capability to have supplies, right? Typically you have animals available to you based on where you're going when you're on a ship or whether with Marines or even like where I was in Romania at a small remote clinic. So sometimes you want to order things outside of your ammo or or you'll get somewhere like I was in a medium like namal's. Great, but there would be some other medications or treatment options that I'd like to have that would be beneficial for our patient population. So you can always. The order outside of your e-mail as well. So remember that you have to just depend on your e-mail too to have with you and available. And you wanna have maximum availability of supplies and and again I mentioned you wanna have a maximum options for your patient population. So maybe having more than one or two of each. So your OCP as I mentioned having more than just one brand maybe having different levels or different progesterones or different levels of estrogen or again monophasic triphasic your nuva rings that can be it depends on your environment because sometimes they do require storage. There are more than four months of use, so reminding your female population if they are using Nuva rings that typically, if it's gonna be more than four months or out of refrigerator, four months needs to be refrigerated at that point that Provera is an easy one to have on board to start people on it. But just just a reminder of those unwanted side effects and that may not be a good time to start up with Provera and those remote environments when the one side effects can just add to an already stressful situation. I do like next logon. It depends on your situation. Obviously probably not being maybe ideal situation on a ship or short term deployment, but you know for me in Romania different base it was very reasonable to have. I had an ability to take them out as needed. Iuds are great but they may not be great to start an employed environment. There are complications right to or on what a complications, adverse issues to placement of them and then also do you have ability to take them out if you do place them. I would recommend maybe having the ability to take them out. After me forceps available so that if women again went to the pain clinic right before they left, they and now they don't really like they have an on one side effects they want it removed. You do have ability to help them out while you're in that deployed environment. Non steroidal anti-inflammatory medications, they always say Motrin for musculoskeletal, but it can be very effective for menstrual issues pre cramping. It can also help with heavy periods so that a lot of women don't want hormone management for heavy cycles, so they would benefit maybe from like an inset therapy treatment regimen for that to help reduce heavy periods.

Having your oral diflucan mentioned before available maybe Navin vaginal options to kind of help with some of vaginitis that you may have that may be. Related to these infection, antibiotics that first and second line therapy for Utis and the bacterial infection vaginitis or flagyl topical, as I mentioned for vaginitis topical antifungals barrier cream, especially if you're going into hot human environments, can be very helpful to prevent, especially if someone have a recurrent issues can be helpful sometimes a topical hydrocortisone cream for short term use can be helpful. One thing I I didn't realize it I didn't really have very often until I was in Romania was iron supplementation and I think it was mentioned too in the previous presentation that a lot of times you won't have the ability to test like I had a queue star, but it was really up and functioning. And then when it was functioning it wasn't very reliable. So a lot of times if women have a history of anemia or they're just having signal symptoms, anemia having heavier periods, it would be nice to have iron supplementation on board. That's not always maybe part of your e-mail. So consider that so supplies. As I mentioned before, you know not a part of Amal, but I would recommend having some extra tampons and pads and various sizes available in the medical area so women are prepared and you wanna be able to offer them that if they're able to, at least for a short term supply. And we'll talk about something too, for maybe sampe cases later. Having hand sanitizers, body wipes, toilet papers, zip lock bags. Again, these are all things you can educate patients in advance to bring with them, but having some available for certain situations. Would be helpful to have a hand in medical and when people are experiencing or needing those things, female urination device, we won't go in detail that in this presentation, but those can be very helpful for situations up tempos that make it very difficult to get to a location where you can void. So maybe having some of those available in case people don't understand the optimal going into and all of a sudden now you're working really long hours or in a location where it's hard. A lot of our MAS, you know where a lot of gear and it's very complicated. Times 2 to have to take everything off to, to to use the restroom somewhere that may not be easy to get to, so recommend having a few of those perennial irrigation bottles. Again, again, good pre communication, supply to have but having some available so if someone is experiencing vaginitis. Might be helpful to have that irrigation bottle for use to reduce those symptoms. Or hopefully you know treat those symptoms. Uh, because they may not be able to get to those readily and they may be on a ship. He may be in a a location that doesn't have like an exchange or any kind of ability to for them to purchase on their own. Next slide. So another big one is just, uh, what's your capability to respond to a sexual assaults? Uh, important to prepare for this in advance. I always say, if you prepare for it, it won't happen if you don't prepare for it, it will always happen. And so these are situations where you don't wanna just pop up and you don't know what you're doing or don't have a plan for it. You know, our goal for victims of sexual assault is not to retraumatization them. So you want to know about trauma, informed care. You want to know about the processes for managing a sexual assault. You wanna know who need to communicate in advance? I encourage you if you're checking on board to a new ship. If you're, you know, going to a new location, make sure you have a standard operating procedure in place of how you would manage sexual assault on the environment you're going into. You don't want the first time you figure that out to be when the victim is in front of you. There's a lot you can create an algorithm of care, very various locations where they would present. Sometimes they present to the UVA and UVA. Takes them down to medical. Sometimes they present directly to you and medical. So how do you contact the UVA? Who is the UVA? Who is your staff or? I think it's always good to connect with the shark to the area you're gonna be in that you know whether it be like a a different AOR. So they often know exactly where you're closest Stampy. Yeah, is close to the MTF. They often, you know, know how to communicate with people who need to to help you figure out what to do with this patient, whether

be restricted case or unrestricted case, or they need a medevac or not. So there are a huge resource of information if you're not used to or RCMP in general for these deployed situations or operational environments, understanding, timeliness and medevac services. So even though I was in a pretty stable location in Romania. And they would say medevac services were available for emergencies, urgent cares within 12 hours. I've had patients with A-fib and chest pain that it still took 36 to 48 hours to get them out of country. And even though sampey cases are considered urgent and are given priorities, that priorities still may be 24 to 48 hours after the assault. And in that time, you do lose a lot of a lot of forensic evidence with that weight. So. So my recommendation, I think we're a lot of operational units are going to is having a SAMP available. Are you a trained Stampy available where the where on the deployment or in the operational environment you're going to one because now you're training trauma informed care to you understand the processes involved with management of sexual victim and how the medevac works for restricted unrestricted cases and two being able to provide that early collection of evidence versus having the patient wait and then trying to transfer them to the local MTF or a local Sampa available so. If you do, are you know and like I said the the need is moving to trying to have stampedes rarely available in certain locations and if you are one of those people who kind of get tagged to go to the training right before you deploy, I highly encourage you to make an effort to reach out to your local MTF or your local stamp program manager in that area to try to get experience, or at least you know, go to be a part of 1 victim sexual assault is a very complicated process. The emotions involved with the victim of sexual assault, it can be difficult to to triage and and manage, and so it's, you know, you don't wanna be the first time dealing with it with that first victim. Right. So you wanna be with somebody who has seen this before. It's comfortable with the exam, those comfortable communicating with nation. So you kind of have an idea of what to expect from that comes in. So that way you're not learning on your new victim. Making sure you're sick, you do have available safe kits, so if you are trained to make sure you do have kits available that they're not expired, just knowing that if you're safe kit is expired. It's based on the supplies and the kit, so even if you have an expired saved kit, if you do have other supplies that would or in the kit that are not expired in your e-mail or your medical clinic and then you can still use that kit making sure you have the appropriate documentation between 9:11 is available as well and then. We'll talk about what we talk about, but make sure you have treatment. Often options available for victims of sexual assaults, and make sure you have STI prevention medications. Make sure you do have potentially have HIV prophylaxis if you feel like you're not gonna be able to evacuation and there's a concern for that. The question is, if you do start someone HIV prophylaxis, you're probably doing better except person because they're going to need maybe some lab testing and follow up. But for those, there are women who are victims of sexual assault, who wanna do a restricted case, who do not want to leave the base. And so therefore you need to be able to treat, hopefully, treat those individuals you know as well if they wanna stay. So we emergency contraceptive and they were discussed in that previous lecture. So having those readily available, having an algorithm to treat our very important to have an advance and and it allows women to have be able to make empowers them to make decisions that work for them, whether it be to stay where they're at either restricted case or medevac or do unrestricted case. We want to power them to make the. They'll make decisions not based on operational environment at all possible. OK, I mentioned this several times a day. Predeployment discussions will go a long way to reduce unnecessary stress for your sailors and officers, your Marines, but also on you as a provider, so that maybe you reduce some of the unnecessary visits. Just come from people not understanding what's normal and deployment. What happens to your body and deployment. Another big one is this garners trust. You know, for between you and and your sailors

and and marines, if they, if they appreciate they they understand that you know what you're doing, that you prioritize Women's Health, that you are approachable, that you want them to come to you for any questions and concerns. They have. The goal is that they will come to you early if needed. What we don't want our women who feel uncomfortable seeing medical and I've seen that a lot you know they maybe they don't want to go see their mail IDC because they don't feel like they're comfortable with them or they really know how to treat Women's Health issues hopefully. You know, you guys are here in this meeting seminar and are improving those skill sets and that will help garner trustors sailors. So you want them to know that you know, you you care about them, you care about the women health issues. You know what you're doing? And they come early because global women to wait till the last minute and now it becomes an urgent emergent issue. And they have a medevac. And now you're it's affecting the operational mission, so. Important to have those discussions early to to honor that trust. Alright, so now what kind of go more into deployments situation. Hopefully some of these things were discussed. Umm, preemptively for deployment hygiene preparation practices. You're best friends with. This is gonna be your Prev. Med docs premed officers who are well versed in what shouldn't be available to help promote good hygiene and reduction of infectious diseases in in austere environments, so ensuring availability of hand washing stations and adequate supply of hand sanitizers don't bit depend on your hand washing. Patients, when I was in Honduras and we were living in tents and we had hand washing stations provided by the the host nation pre Med tech told as well. They're fully colonized. So you're just treating your only coli for somebody else's ecoli. So make sure your hand sanitizers are available and plenty of it. So don't don't make do. I've been in places and I've been on deployments where the medical did not have these things and the expectation was that people would have brought them. That's great educate people, but you still have to be prepared. For people who are without it, or just to be able to place out in general, you know highly occupied areas to reduce spread of diseases so. Consider that and show up to you for when to empty their bladder men and women. But a lot of times in the operational environment you're working 12 hour days, you know on humanitarian missions during the collaborative health engagement, you're seeing 800 patients and you know, oftentimes people don't wanna quit. So they don't want to stop. They wanna keep working because there's just so much work to be done. And it's important that there are still, though, taking breaks stopping and taking care of themselves as well. So same thing with hydration. Sometimes you're just working, working, working. You, you're and you blow off people saying, hey, have you had anything to drink? I recommend identifying people to go around and ask people hey behind drinks lately. Take water to that. And a lot of times your folks are again are prioritizing mission over themselves. And so you as a medical provider, medical leaders from the junior coreman to the senior medical officer can drive this promotion of self-care with use of avoiding patterns and hydration patterns. I sure availabilities showers if at all possible. If not showers, and you know can you can you bring or their opportunities for bringing those stand up water sources? You know, Afghanistan, obviously. Showers aren't readily available, but there were ways you can bring shower bags. You have water where it just runs over the top of you. So just consider having alternative sources to provide hygiene if structured areas are not available. Structured toilet structured bathrooms, showers are not available. Check in regularly with your folks. Again, everybody's busy. Oftentimes in these environments in mission comes first and so people put their issues and and health concerns aside, so it may take someone coming in and saying, hey, how are you, how are you doing today? How's your mental health? How are you feeling? Are you having any issues or, you know, having, you know, Women's Health concerns, you know, putting that out there a lot of times that then we'll drive. Oh, well, actually, yeah. This is going on versus them having to make the effort to make an

appointment or go see medical, which oftentimes in maybe there. They're sleep time, so you know the clinic hours of the Romania are from 8 to 1600, but maybe they're on night shift. So it's a really hard time to get to be seen. So you want to be flexible to try to meet the demands of your entire population. So oftentimes we would extend our certain days to be able to allow our night time workers to be able to be seen later in the day before they go to work versus having the wake them up early. So just kind of knowing your population, checking in with them, making sure you're there to support them, and then you're flexible to be able to ride them service. They can do their jobs and and meet the operational mission. And we mentioned this before, but if you can get those concerns early and address those concerns early, your your goal is to hopefully reduce any urgent emergent issues that now require a medevac and affect emission readiness. OK, so just some post doc considerations. You know a lot of you know if you're like on a shore rotation or you're overseas and doing, you know, kind of circling deployments, there's not a lot of time to get care down between deployments or deplete through between workouts. And so you want people and encourage empower people to go seek those referrals right after you return from deployment. For me, when I was in Armenia, I was able to, I had access to Alta, which was nice. I missed. I missed Alta on Genesis. Now I'm still learning it. But I would be able to put referrals in, you know for issues I was not able to thoroughly work up right a lot of times. It's just trying to, you know, is the condition enough we can just get by and treat symptoms and then hopefully they're going to be, you know redeploying in two months and that can take care of them. I would put those referrals in I'd or those laps for them so they can get those done as soon as they get back and and that was nice to have that ability to always have that ability. But if you can that's ideal. Another recommendation that I learned in Romania's when you're doing your post deployment assessments, those can be done. You have 30 days before you redeploy or 30 days after. At first. I was doing them right as my deployers were going back, you know, putting in referrals and and and checking that box. Well, what I learned is I would often get deployers back in five to six months. And those things were not taken care of and maybe the referral got lost. Maybe they got busy. There was no follow up. You know again people kind of forget about themselves. And just kind of focus on our things or men, they had a surge, so they had to restart their work up sooner. I recommended or I started doing, not the predeployment assessments there. I would, you know, I'd send the e-mail out and say, hey, if you've got concerns or you wanna see some specialty care come see me. I'll put those in early. But I had them do their poise deployment, health assessments, the 30 days after, within that 30 days and that provided an opportunity for, you know, someone to ask you were you able to get that referral? Were you able to get into be seeing ohh you you the referral didn't go through or. You know, here, let me put it in again. We're able to get in touch with mental health. Were you able to do counseling where you able to take care of these needs that you have? And if not, then that's good opportunity to to do that. So I kind of cautioned against getting that check box done at the end of deployment where a lot of people like just, you know, take Doc just kind of just get it done. I don't have to worry about it. No, I want somebody checking in with you on the back side, whether it be you, because they belong to you or whether it be their medical ratings clinic that they belong to and they return to just something you consider that. Felt was helpful for our situation and Romania, where we often had high up tempo or surges where people kept coming back and had a short amount of time between deployments. Uh documentation of deployment and you know related conditions very important that you appropriately document any medical issues that happen during deployment, how they were treated and then any exposures they may have had and educating your your sailors on with those exposures were by the end of deployment so that they can you know if you're not able to properly document maybe don't have electronic health

record everything you do is on paper charting you want to be able to make sure that stuff gets into their medical record and educating them allows them when they're doing the post deployment assessment they can bring those. Things up and can be documented in their PDH RA or PHA. And then you know, I recommend also if you know on ships like I said, not we don't often have access to electronic health records and we just do paper charting, potentially giving copies of that, that documentation that you did for that health situation to them. So they can take that to the follow on provider either PCM or the specialist if they've had a referral in so that you know they're not starting over. You know that there is some continuity of care because but I also hear and complaints a lot on primary care is that you know patients are like well, I just saw this prior to six months ago and they did all this and then nothing happened. And they're always restarting their care. And so you wanna advocate to have continuity or continued care and also advocate that they that they advocate for themselves and if they're not getting, you know, the answers that they need timely, that they are continuing to ask the question pretending to be seen so they can get things taken care of before they have their next appointment. So things start putting off and down the road years and years until they're separation or timing physical comes up and then they unload everything in those situations. You wanna try and take care of them earlier and not have them wait till the very end when things are worse than they could have. After action reports exceptionally important right, I I don't know how many times I I feel like in the name. Sometimes it's a. It feels like the first time every time, even though this is a process that's been done about a billion times. I'll tell you on the hospital ship that's been out every two years through last 20 years. I don't know how many times I was like, how do we not have an SOP for this? We probably did. It was just lost in the turnover, right. So making sure you have after action reports readily available that really help the person behind you set you up, help them. You set them up for success. Let them have some lessons learned from you, right? And then maybe that will get prepaid back to you when you go to your next operational mission and there's a detailed after action report that you can prepare for. You know, what were some things that you wish you would had on the deployment? What were some situations that you weren't able to fully or adequately take care of because you just you don't have access to comprehensive care and those environments. So make sure you read over those cuz I also feel like a lot of actors actually reports are done, but then nobody looks at them before going on in deployment mission. So. I do recommend that you ask about those where are they and look at them. I think it'll save you a lot of stress and the long run when when those situations occur with you and it would be nice to be at least have some idea what to expect in advance. Alright, just briefly, I know a big top of Women's Health can is reproductive concerns. A lot of women and families are often. Uh, you know, trying to figure out their family planning and rely on deployments and operational cycles. And I'm really we want to educate women on the available options for them, especially if they're in high up temple commands or expect to be in that for several years. What's available for aggro retrieval, what's available for comprehensive reproductive care if they're having infertility issues or again, they're just in a high up temporal situation trying to allow them to get into maybe. Until you services, as soon as they get back from deployment to get things started as we know, it's often very hard to find and fertility clinics. It's often very hard to get into those clinics and it's a very long workout process. So you don't want to delay that because before you know it, now they're at the next command and then now they get range deploy again. So just being knowledgeable about and resources available so that you can educate your sailors on those resources can go along way again to make that allow them to understand that you are there for them. You understand their concerns and their frustrations and that you are there to support them. And given put them in the right direction to get the best care possible, right? So that's really our goal is to make a

medically ready force, but also support them at the home of our when they aren't in operational environments. So I think that is all I have for slides. Yeah. And I'll just take a look at any questions that it really see as we went through. OK so. I think someone mentioned adding baby wipes and different underwear for your gosh, a lot of questions, a lot of comments. OK. Has there been an investigation? Things I mentioned earlier about submariners and maybe some research being done that's great. And then perhaps maybe wives talk about study, great idea. Where can we get female urine urination devices? I I don't know if we carry them, but I know Amazon. You know, I've seen a several different types on Amazon. There's actually a multitude of different types, and so usually typically, Amazon's probably a good option to look for those if you're looking forward to carrying your medical supplies. I don't know, honestly, if we were able to find them, if they're in like our e-mail supply. But I would talk to supply Officer Petty Officer about that in advance. You see, that's something that is or, you know, we can't order and have available in the medical clinic. Somewhere that's awesome advice, cleaner, arenia. Now they thought I'm replies from the next last week. Yes. And so encouraging and and knowing what's you know. Yeah, even in Romania. Like, even in we do have a small neck. So you typically run out of things. You know you don't have a good supply in those remote locations. And so making sure that those are priority to be ordered and and ordered in advance would be helpful. So talk to your supply person or typically I think it may, it's usually Armenian individual who's running those supply shops. You have someone mentioned Amazon good option and do larger ships such as cars and bits heavy sampayan board. I believe that that is becoming a requirement. I don't know someone mentioned they do require great so the carriers do require see if you're ready providers as I mentioned in the presentation though. A lot. You know, I I think if safety is a is a passion for me and a lot of people are weary and uncomfortable with providing safety services. So if you are one of those and it's just kind of uncomfortable for you, you're really that person who needs to get that hands on experience with a trained professional Sampa use when doing in a while so that you can gain that confidence and that is not, you know, awkward and weird for you and the victim when you're trying to do that during an operational environment. OK so. 50 FT docs were not saving the past. Hopefully that changes. Uh, there is some discussion about whether, you know, I think in Romania they were talking about whether we should continue having sampi services because we don't have the comprehensive management capability like the behavior of health and the follow up and and my answer that is is is no part of the same fee and the benefits of sampi is that early collection of forensic evidence and also that being able to provide that trauma informed care that you're trained with as a SAMP 2, those victims and that's a great bit of knowledge to have and to be able to educate and speak. To, you know, victims of sexual assault, and you may not be able to do everything. You may not have. A woodland may have an online resource you may not have all the capabilities, but if you can do some of those things to preserve evidence so they're or be knowledgeable about, how do you maintain friends? That evidence keeping, bagging clothes that were part of a sexual assault and having that patient care, keep it with them. Right. Because chain of custody is significant issue for friends. Evidence. So being at least gives you knowledge to be able to educate and provide. You know good advice to your victims of sexual assault. And I think that was it. So any any questions? Alright. Well, I think that's my time. I appreciate the opportunity to speak today and everyone have a great day. Thank you so much, Commander Allison. Alright, this concludes our sessions for the day, but I will hand it over to Commander how to close this out today. Commander, how green with us, ma'am. All right, no worries. She may have had something come up. So I'm happy just to provide some final remarks for the day. On behalf of Commander Hug. So thank you all again so much for your dedication and attention today. We had the chance to hear from some great

speakers who covered a lot of information that we hope you found to be very valuable and useful. So just another reminder to please register by 1300 Eastern Time on 28 January to receive continuing education credit. More certificate of completion for this event, following the instructions that were previously provided also provided via e-mail tomorrow. We're looking forward to continuing our training beginning once again at at 1000 Eastern Time. So please as we did today, log in just a bit early to ensure that technology is up and functioning properly. And additionally, Please ensure that your name is displayed when logging on. So I think most of the time. That pops up automatically, but if not, please just change your name so it looks like everyone did a great job of that day. So thank you so much and please feel free to reach out with any questions before we continue on to day two tomorrow. And again we really appreciate all of your time and attention. So thank you for being here. We will see you tomorrow. Bye. Bye.