Practical Contraception UPDATE - CASE STUDIES

David M. Plourd, MD, FACOG

Staff Obstetrician & Gynecologist & Obstetric Hospitalist Formerly Naval Hospital San Diego, CA



CONTINUING EDUCATION COMPANY

1

Disclosure

I have no financial interests or relationships to disclose.



(CONTINUING EDUCATION COMPANY

Additional Disclosure

Also, for this topic, the terms "woman" refers to any patient who has female reproductive organs and the potential to become pregnant. We also need to consider the contraceptive needs of transgender men and gender nonbinary persons.



(CONTINUING EDUCATION COMPANY

Learning Objectives

- Review and update the various contraceptives: currently available, the latest, and soon-to-come
- Augment one's patient-centered approach to counseling and prescribing contraception
- Remove unconscious barriers to access to contraception; facilitate easier access
- Incorporate the U.S. MEC guidelines to empower women with preexisting medical conditions to feel comfortable with contraception

Reproductive Justice

- The human right to determine one's
 - Sexuality
 - Gender and identity
 - Bodily autonomy
 - Right to have children
 - Right to not have children (for a time, or forever)

5

Sexual History – More Inclusive Verbiage for 2024

- OLD: "Do you have sex with men, women, or both?"
- NEW: "Are you currently having sex of any kind, oral, vaginal, and/or anal, with anyone?"
- The "6 P's" of the sexual history:
 - Partner(s)
 - Protection
 - Prior STI Hx
 - Preexposure prevention (HPV vaccine)
 - Planning on pregnancy?
 - Pleasure ("Are you satisfied with your current sexual relationship(s)?")

Contraception 2024

Empowering Women in Making Reproductive Choices

David M. Plourd, M.D.

7

What We Could Learn from COVID in Providing Contraception

- Nearly 1 in 5 (18%) women were not using their preferred method of contraception because...
 - Cost
 - It would require an office visit
 - Medical condition(s)
 - Partner's preference



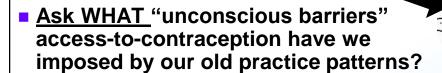
Ranji U. Kaiser Family Foundation webinar. April 21, 2021





Question the Status Quo

Ask WHY have we been doing things a certain way for all this time



Most of this information I'll be presenting today was already evidence-based <u>PRE-pandemic</u>, but was not <u>implemented until the pandemic forced it to be</u>

What's New ...



11

Forms of Contraception (16)

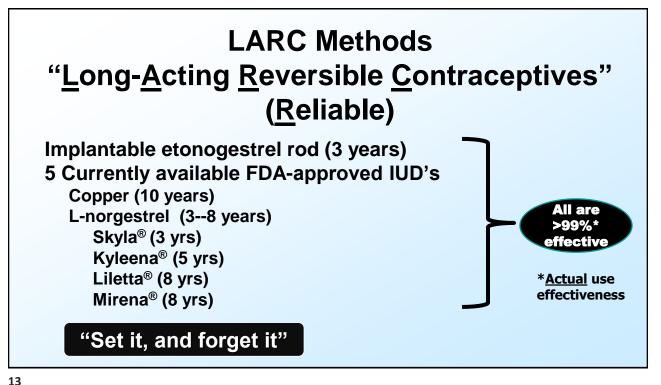
Hormonal >90% eff'v.

- Birth control pills
- Transdermal patches
- Vaginal rings (monthly; yearly)
- Injectable
- Implant (subdermal rod)
 - Hormonal IUD (4 FDA-approved)

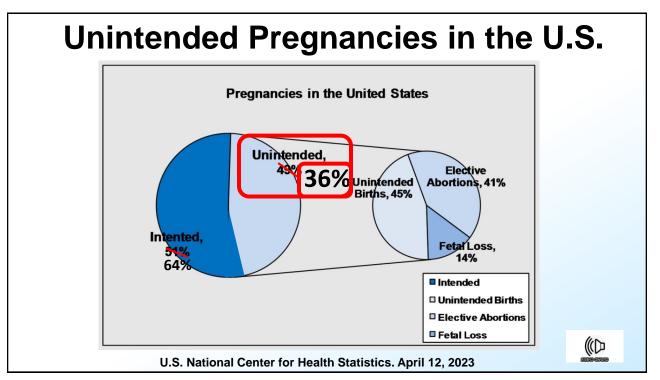
>99% <u>actual use</u> efficacy

Non-hormonal 70-85% eff'v.

- Condoms (male and female)
- Diaphragm
- Cervical cap
- Vaginal spermicidal sponge
- Vaginal spermicidal gels
- Copper IUD >99% <u>actual use</u> efficacy
- Fertility awareness methods
- Withdrawal method
- Breastfeeding
- Abstinence



__



L

Highly Effective Methods Available

> 90% actual-use effectiveness

Hormonal

- OCP's 92.4%

– Patch 94.5%

– Monthly Ring95.2%

Yearly Ring96-98%

Depot Injection 96.4%

– Implantable Rod 99.994%

A Intrauterine

c' - Copper-based 99.6%

s – L-norgestrel based 99.8 %

15

So, Why Is the U.S. Unintended Pregnancy Rate So HIGH?

- Among 15—44 y/o women who wish NOT to become pregnant – only 11 % do not use contraception
 - Yet that 11% contribute to HALF of all unintended pregs
 - More distressing: Those USING contraception contribute to the other half
 - »BUT, those using contraception CORRECTLY account for only 5% of all unintended pregnancies





Women's Perceived Safety

In a public survey of 1,839 women... 56% of women believed that OCP's were MORE RISKY than pregnancy

Kakaiya R. Contracept & Repro Med. 2017; doi 10.1186/s40834-017-0046-5

19

Then There's ACOG Perceived Safety

- "ACOG supports OTC [some: BTC] access to hormonal contraception without age restrictions". 2019
 - OCP's, vaginal rings, contraceptive patch, and
 DMPA injections (SubQ can be done by patient)
 - »Eliminates the need for prescriptions
 - »Relies on the woman to self-screen for eligibility
 - A simple matter of one's personal medical history
 - »Pharmacist-provided contraception & counseling for adolescents < 18 y/o, & for injections (in some states)
 - Refc: ACOG Committee Opinion. #788, October, 2019 (OB & GYN. 2019; 134(4): e96-105

- "ACOG supports OTC [some: BTC] access to hormonal contraception without age restrictions". 2019
 - »Relies on the woman to self-screen for eligibility
 - A simple matter of one's personal medical history
 - »Pharmacist-provided contraception & counseling for adolescents < 18 y/o, & for injections (in some states)</p>
 - Refc: ACOG Committee Opinion. #788, October, 2019 (OB & GYN. 2019; 134(4): e96-105

Patient Self-Screening Tool

- 1. Have you had a DVT or PE
- 2. Could you be pregnant
- 3. Have you had a baby in the past 3 weeks
- 4. Are you currently breastfeeding; baby <6mos old
- 5. Do you have high B/P
- 6. Are you a smoker >35 y/o
- 7. Do you have diabetes

- 8. Do you have migraine HA's
- 9. Do you have liver disease or a hx of liver CA
- 10. Do you have GB disease
- 11. Hx of breast CA
- 12. Do you take a statin
- 13. Do you take Rx for seizures

or TB

Initiation and Continuation of **Contraception Through Telemedicine**

- 1. Questionnaire for contraindications to hormonal contraceptives
- 2. But what about the blood pressure and physical exam/pelvic exam?

Assessment	In Office	At Home			
Blood pressure	In-person measurement	 Home BP cuff Self-report of normal BP in last year Risk-benefit conversation 			
Physical exam	Not routinely indicated	N/A			
Urine pregnancy test (UPT)	Point-of-care UPT	 Reasonably certain not pregnant questions from CDC Home UPT comparable to office UPT 			

23

As of Nov., 2024: 29** States & D.C. Allow **Pharmacists to Prescribe Contraceptives**

New Mexico Illinois Arizona

New Hampshire Indiana **Arkansas**

New York Massachusetts California

N & S Carolina Maine Colorado

Maryland Oregon Connecticut **Rhode Island**

Michigan Delaware Minnesota **Tennessee**

Dist. of Columbia Utah Nevada

Vermont Hawaii **New Hampshire**

Nevada **Virginia** Idaho **West Virginia**

**** Was only 19 prior to 2020**

What's New ...



25

What's New ... August, 2018 EE/ Segesterone Acetate

a **<u>yearly</u>** vaginal contraceptive ring

- 3 weeks in / 1 week out
- (rinse & store in a case at room temp),
 - then replace the same ring x 13 cycles
- 3 weeks x 13 cycles = 39 weeks (?? Would it work continuously for 39 weeks??)
- 96-98 % efficacy [Pearl index of 2.98]
 - May be removed for up to 2 hours for intercourse
- Does NOT require refrigeration prior to dispensing
- COUNSELING POINT: ring turns dark brown over time of use





FDA-approved Dec. 11, 2019

- The first generic equivalent to the NuvaRing[®] (EluRyng)
- Delivers 0.120 mg etonogestrel / 0.0015mg EE/day



27



What's New: FDA-approved June 2019 Drospirenone-only OCP

- Formulation: 4.0 mg DRSP in a 24 + 4 cyclic regimen
- Efficacy (1st year): 93.3-96% (reliable ovulation suppression)
- Amenorrhea occurred in <u>74%</u> of users, by 1 year
- Lower breakthrough bleeding rate
 - 40.3% vs ~65-70% for most other OCP's
- Long-acting progestin allows for greater latitude in the tight timing of daily dosing for all other POP's

Contraindications to Progestin-only Contraceptives

- MEC Category 4 conditions
 - Breast CA in the past 5 years
 - Renal impairment
 - Adrenal insufficiency

29



FDA-approved March, 2020 A New Contraceptive PATCH

- Formulation:
 - Ethinyl estradiol 30 mcgLevonorgestrel 120 mcg
- N = 1,736 women < 35 y/o; 15,165 evaluable cycles
- Pearl Index 5.83 across all BMI's
 - 3.5 in BMI<25 kg/m²; 5.7 in BMI 25-30kg/m²



May 22, 2020: 1st Non-Hormonal **Contraceptive FDA-Approved in Decades**

🙀 A novel intravaginal gel

- NOT Nonoxynol-9 (like all other spermicidals) which works by disrupting sperm cell membranes)... BUT | leads to increased STI's
- Instead, Phexxi is an acidic intravaginal gel
 - » BUT only 86.3% eff'v @ 6 mos = other OTC intravaginal spermicides)
- Phexxi® (lactic acid, citric acid, & potassium bitartrate)
- Requires a PRESCRIPTION (\$\$, access)

MAY the risk of STI's (chlamydia & GC by 50% & 78% respect'ly)



31



Must be applied <60 minutes prior to intercourse

Packaged as 12 prefilled applicators



Both Copper AND Hormonal IUD's Are Very Effective as E.C. (Jan. 2021) Off-label use

- Randomized trial: 638 women received either IUD within 5 days (<120 hours)* of unprotected sex</p>
- Pregnancy test done at 1 month F/U visit

	# of "sexposures"	# of pregnancie	es
Hormonal IUD/IUS	317	1	Off-label use
Copper-IUD	321	0	Off-label use

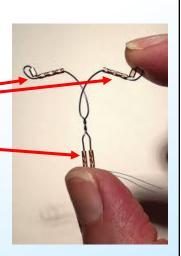
*Copper-IUD >99% effective in women 6-14 days after UPI

Turok D. NEJM. 2021; 384:335-344 DOI: 10.1056/NEJMoa2022141 BakenRa A. Obstet Gynecol 2021

33

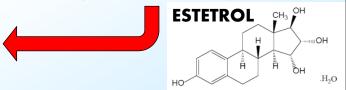
Coming Soon: A New Copper IUD

- Copper 170mm² IUD
- VeraCept Copper IUD (nitinol frame)
 - 170 mm² of copper
 - »Copper where you need it
 - At the tubal ostia
 - At the internal cervical os
 - Small & flexible 32 x 30 mm
 - Lighter bleeding
 - »(related to Cu++ content)
- Highly eff'v: 99.54% [98.33--99.94]
 - » Turok D. Obstet Gynecol. 2020; 135: 840-4



FDA-approved April, 2021 A New OCP with a <u>Novel</u> Estrogen

- a 24/4 regimen
 - Not good old ethinyl estradiol found in ALL other CHC's
 THE FIRST NOVEL ESTROGEN in >50 YEARS
 - 14.2 mg Estetrol (E₄) a natural estrogen produced by the fetal liver in pregnancy (10-20% the potency of E₂) long T^{1/2}
 Less adverse impacts on coagulation, lipids, B/P than EE
 - 3 mg Drospirenone (DRSP) progestin with a long T^{1/2}
 - 97.4% efficacy97.1% in BMI>30 kg/m2



35

Advantages of Estetrol Over Ethinyl Estradiol

- Neutral impact on liver not prothrombotic
 - Lower VTE-risk (theoretic) awaits clinical experience
 - VTE is the principal health risk of combination OCP's
- Beneficial on bone
- Beneficial on heart
- Beneficial on vaginal epithelium
- Antagonistic on mammary tissue
- Excreted in urine (no increased risk of gallstones)

"NEWS FLASH": July 13, 2023: The FDA Approved the First OTC Oral Contraceptive Pill

- Norgestrel 0.075 mg
- Not REALLY the 1st OTC OC- since the "morning after pill" was FDA-approved OTC ~ a decade prior in June, 2013
- 98% effective with perfect use; 91% with typical use

Allen RH. Obstet & Gynecol. 2024; 143: 184-8

37

Isn't There a Reasonably
Quick and Easy App/Way to
Look Up the Safety of Various
Contraceptive Methods
in Women with
Specific Medical Conditions?





CDC's Updated (Aug 8, 2024) U.S. Medical Eligibility Criteria (MEC)

KEY	
No restriction (method can be	1
Advantages generally outweigh	2
Theoretical or proven risks	3
Unacceptable health risk (method	4

No restriction for use of the contraceptive method				
Advantages of using the method generally outweigh the risks				
Risks usually outweigh the advantages of using the method				
Unacceptable health risk if the method is used				

39

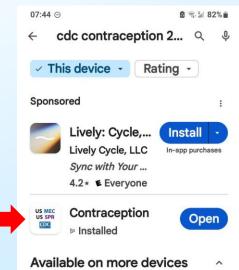
Which Best Describes Your Current Practice?

- A. I am familiar with, and regularly refer to, the U.S. MEC App for contraception
- I have the U.S. MEC free App, but only use it only occasionally
- C. I have heard of, but rarely if ever use, the U.S. MEC
- D. I am not familiar with the U.S. MEC for contraception



U.S. Medical Eligibility Criteria ("M.E.C.") 2024 Update



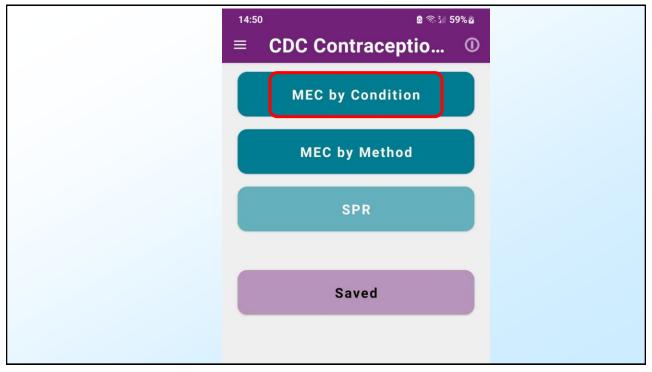


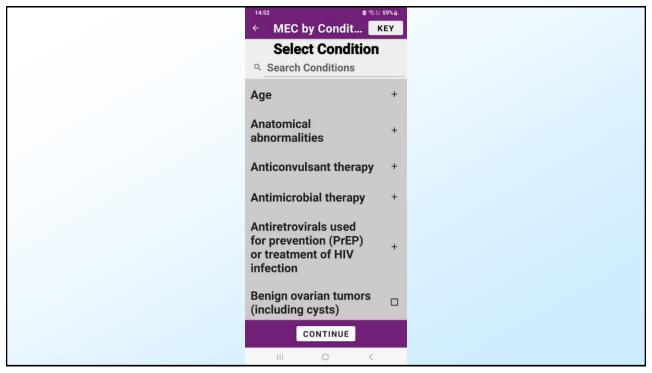


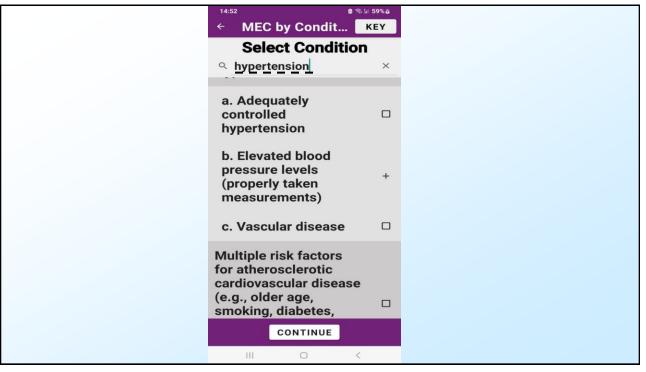


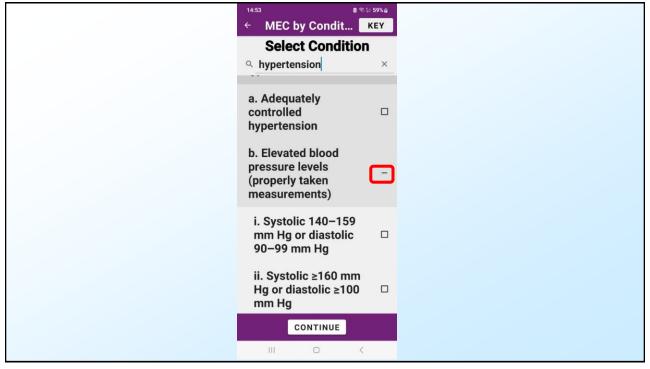
CDC's Mission Statement Regarding the 2024 M.E.C.

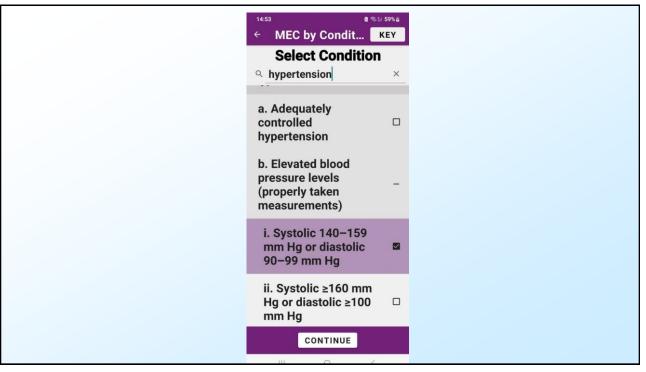
The <u>2024 U.S. Medical Eligibility Criteria for Contraceptive Use (U.S. MEC)</u> comprises recommendations for the use of specific contraceptive methods by persons who have certain characteristics or medical conditions. The goals of these recommendations are to remove unnecessary medical barriers to accessing and using contraception and to support person-centered contraceptive counseling and services in a noncoercive manner. The information in this report replaces the 2016 U.S. MEC (CDC. U.S. Medical Etigibility Criteria for Contraceptive Use, 2016. MMWR 2016:65[No. RR-3]:1–103).

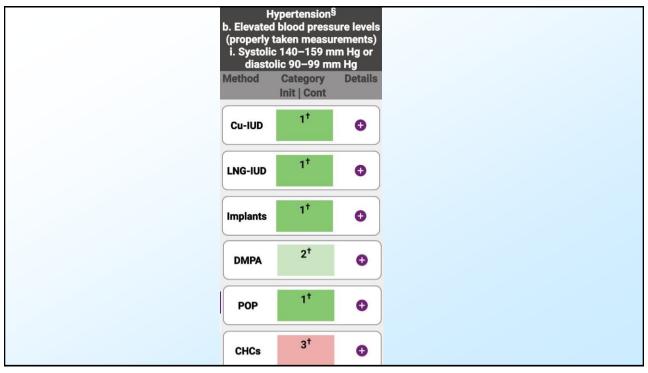












Case #1

A 25-year-old law student presents requesting birth control pills as she has recently become sexually active. She has not been seen for any healthcare for over 5 years, and has never had a Pap smear

What Would You Advise Her, Regarding Her Contraception Options, If She Has SLE with + Antiphospholipid AB's?

- All of the LARC methods are "acceptable without Α. restriction" (MEC category 1)
- Only the copper-IUD is "acceptable without В. restriction" (MEC category 1)
- She may safely use any hormonal contraceptive C. (they are all MEC category 1 or 2)
- She should first have a pelvic exam and cervical D. cytology before you can prescribe any contraceptive

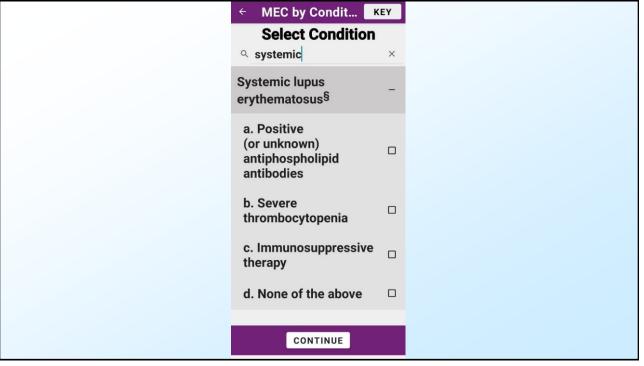


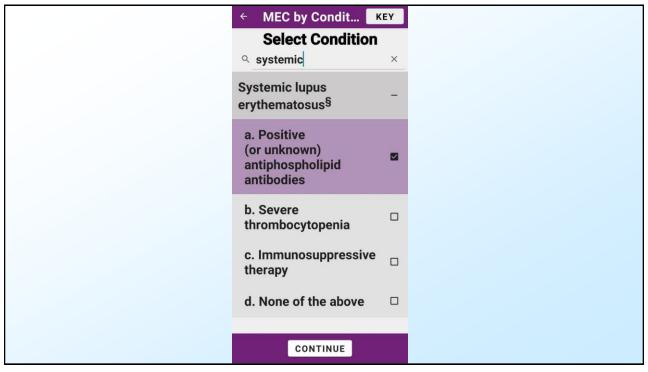
(CONTINUING EDUCATION COMPANY

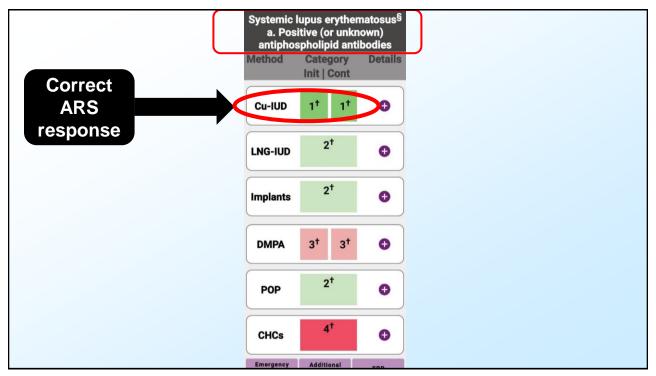
51

CDC's U.S. MEC App (Free) **UPDATED:** Aug 8, 2024



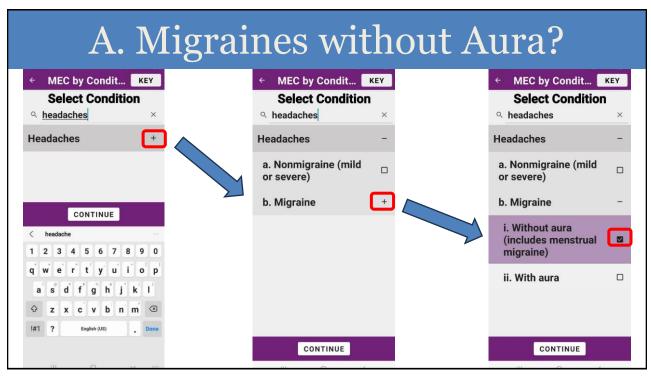


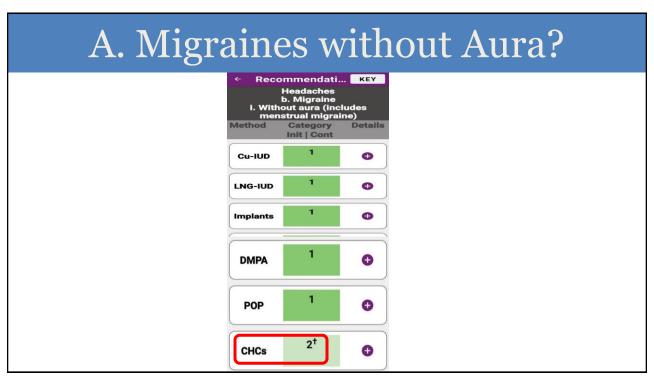


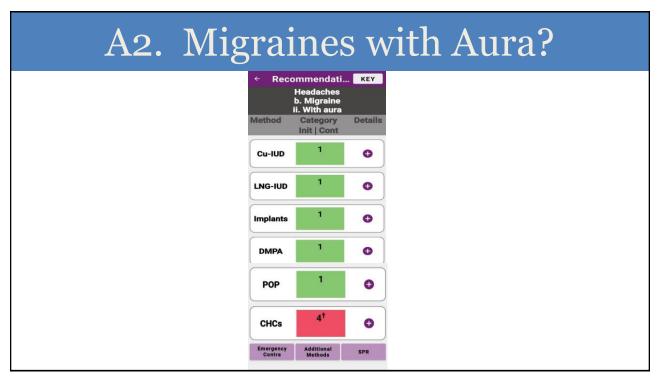


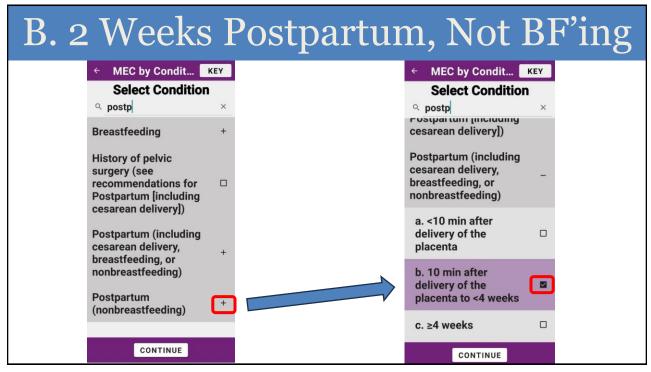
Which of the Following Conditions Is MEC Category 1 (No Restriction On Use) for Combined Hormonal Contraceptives (e.g. Birth Control Pills, Patches, Rings)?

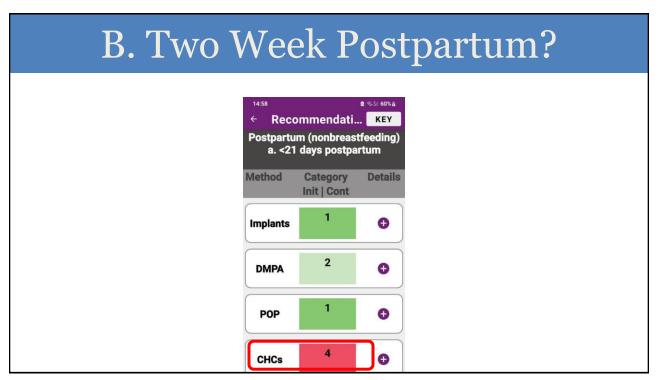
- A. Migraine headaches without aura
- B. 2 weeks post-partum, not breastfeeding
- C. BMI > 30
- D. Varicose veins of the lower extremities

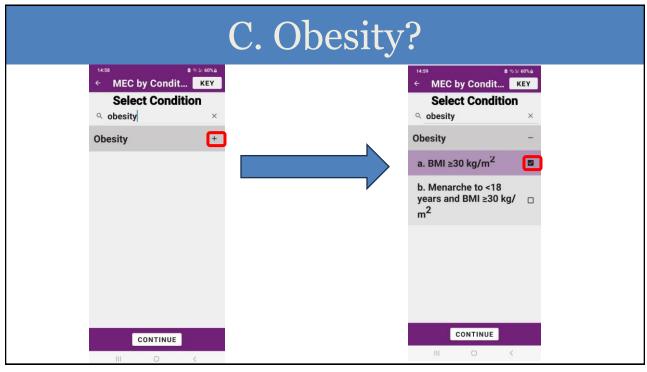


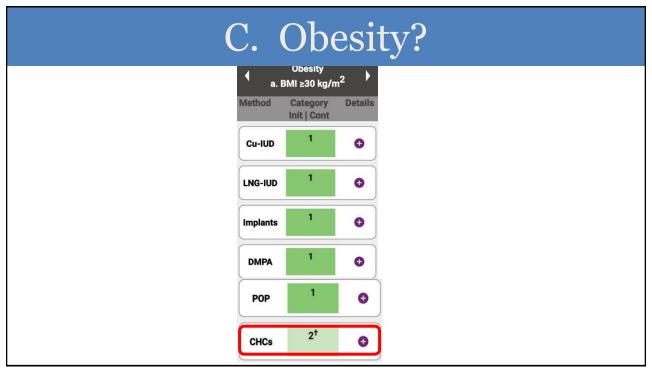


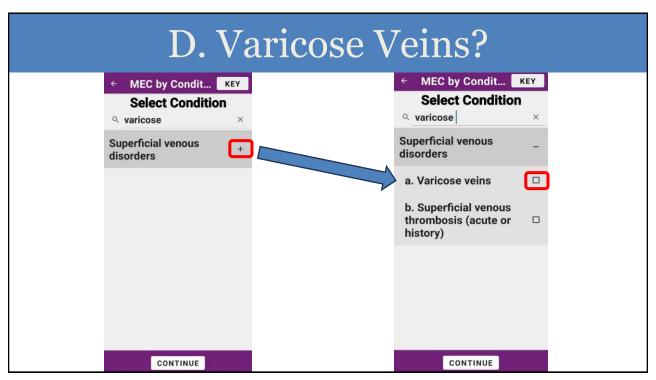


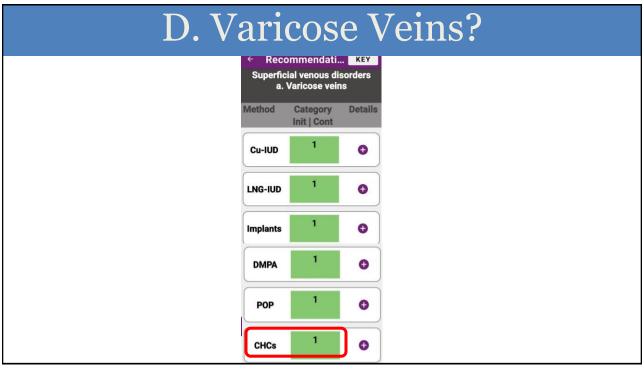










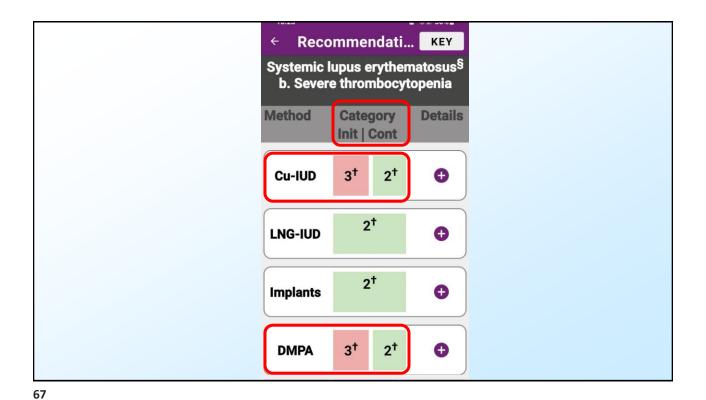


A Source of Confusion Regarding the 4 MEC Categories

Occasionally, the recommendation will be different for INITIATING vs CONTINUING a contraceptive method in the face of a particular medical condition

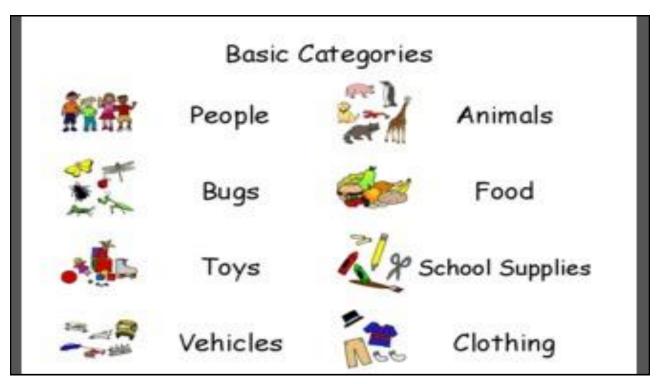
e.g. SLE with severe thrombocytopenia

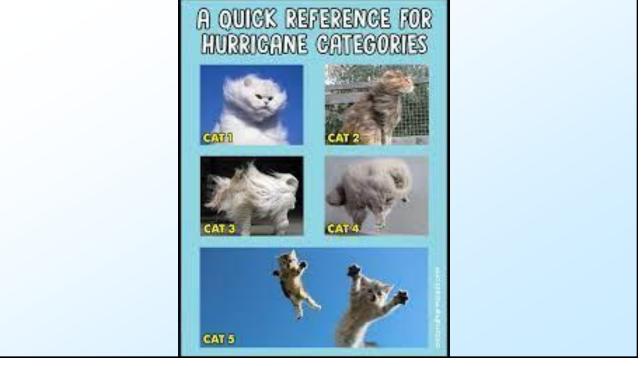
Condition	Sub-Condition	CHC	POP	Inje	ction	Implant	LNG-IUD	(ıı	·IUD
Systemic lupus erythematosus [†]	a) Positive (or unknown) antiphospholipid antibodies	4	3	3	3	3	3	1	1
,	b) Severe thrombocytopenia	2	2	3	2	2	2*	3*	2*
	c) Immunosuppressive treatment	2	2	2	2	2	2	2	1
	d) None of the above	2	2	2	2	2	2	1	1



Background Information Regarding the U.S. Medical Eligibility Criteria (MEC)

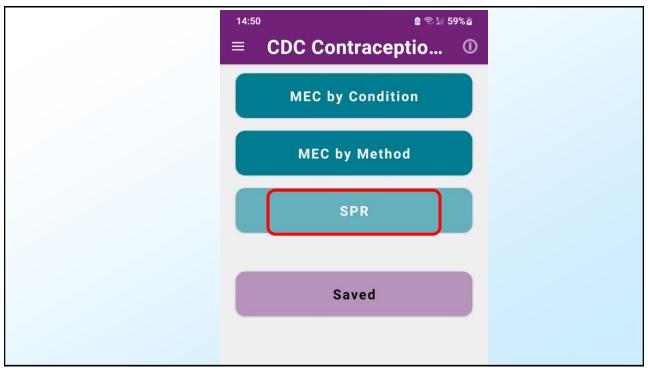












The Expert Panel Made Four Major Changes/Additions to the 2016 SPR

- Updated recommendations for the provision of analgesia during IUD placement
- During recommendations for managing irregular bleeding during implant use
- New recommendation regarding testosterone and the risk of pregnancy
- New recommendation for self-administration of injectable contraception

CDC MMWR. Aug 8, 2024. 73(3);1-77

1. Analgesia for IUD Placement

- Misoprostol is not recommended for routine use for IUD placement
 - Misoprostol might be useful in selected circumstances (e.g., in patients with a recent failed placement).
- Lidocaine (paracervical block or topical) for IUD placement might be useful

75

2. Bleeding Irregularities During Implant Use

- Pre-insertion counseling is the BEST approach
 - Set expectations
 - "The most cited reason for a woman to seek early removal is bothersome unscheduled bleeding"
- Reassurance that irregular light bleeding is normal
 - Many (34%) will have infrequent bleeding (<3 episodes/ 90 days)
 - amenorrhea may occur (in 13-22% of women by 12 mos.)

Bleeding Irregularities During Implant Use

- Hormonal treatment
 - 20–30 µg ethinyl estradiol [EE]
 - Combined oral contraceptives [COCs]
 - Menopausal estrogens
- Antifibrinolytic agents (e.g., tranexamic acid)x 5 days
 - For heavy bleeding
- Nonsteroidal anti-inflammatory drugs
 - e.g. celecoxib, ibuprofen, or mefenamic acid) x 5–7 days
- Selective estrogen receptor modulators (SERMs)
 - e.g. tamoxifen x 7–10 days

77

3. Testosterone in Transgender Patients

- Counsel that testosterone use might not prevent pregnancy among transgender, gender diverse, and nonbinary persons with a uterus who are using testosterone.
- Offer contraceptive counseling and services to those who are at risk for and do not desire pregnancy

4th SPR: A Simple Way to Empower Our Patients to Reduce Their Risk of Unintended Pregnancy

79

4. Sub-Q Injectable DMPA

Self-administered subcutaneous depot medroxyprogesterone acetate (DMPA-SC) should be made available as an additional approach to deliver injectable contraception

Self-Administered Sub-Q DMPA: A Viable Solution in 2024

Sub-Q DMPA has been FDA-approved since 2004

Averts needs for medical-setting encounters/risks

Perfect when access to care is restricted

20% higher continuation rates (at 1 year) compared to in-clinic administration of IM DMPA

Mitigates racial disparities in access to contraception

Same efficacy for 150 mg IM and 104 mg sub-Q

Burlando A. Obstet & Gynecol. 2021; 138(4): 674-7

81

Self-Administered Sub-Q DMPA in 2024, Continued

HOW TO:

At initial office visit:

Educate patient on contraceptive options

Office staff educate and rehearse the patient on proper self-injection technique

Give the patient DMPA 150 mg IM – to give her and the pharmacy a 3-month lead time in getting DMPA sub-Q

Promote local pharmacy awareness and uptake

Prescribe to a cooperative phcy, and provide alcohol wipes

At-Home Self-Administration of SubQ Depo Provera

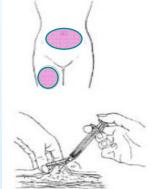
Prefilled syringe with 26 gauge needle 104mg/0.65 mL

Inject in anterior thigh or abdomen DON'T RUB injection site

Every 12-14 weeks

If she forgets - at >15 weeks and 0 days:

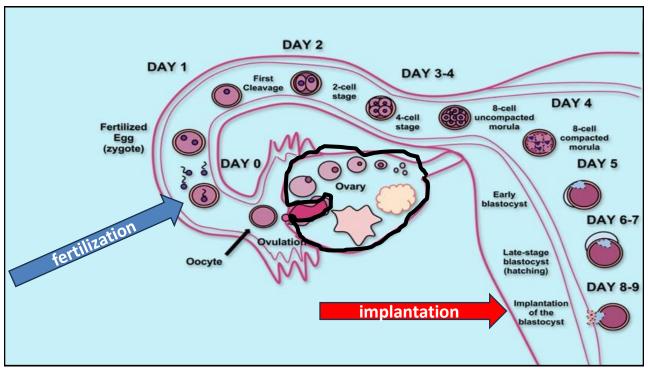
Evaluate her individual pregnancy risk (shared decision making) She can self-administer; consider BUMBC for 1 week



83

When Does a Urine Pregnancy Test **Become Positive?**

- A. Within 12-24 hours after fertilization
- B. Within 3-5 days after fertilization
- C. Within 7-10 days after fertilization
- D. Not enough information to answer the question



Excluding Pregnancy with Certainty: An Illusion and a Barrier to Access

- ILLUSION- a serum or urine \(\beta \)-hCG can miss an early pregnancy in the luteal phase
- BARRIERS to CARE-
 - Requiring a point-of-care hCG and/or
 - Requiring abstinence for >10 days and/or
 - Requiring a second visit after abstinence and/or
 - Requiring that she's menstruating at the visit

"PREG" <u>Pregnancy Reasonably</u> <u>Excluded Guidelines</u>

- 1. Is ≤7 days after the start of normal menses
- 2. Has not had sexual intercourse since the start of last normal menses
- 3. Has been correctly and consistently using a reliable method of contraception
- 4. Is ≤7 days after spontaneous or induced abortion
- 5. Is within 4 weeks postpartum
- 6. Is fully or nearly fully breastfeeding, amenorrheic, and <6 months postpartum

Stanback J. Checklist for ruling out pregnancy among family-planning clients in primary care. *Lancet.* 1999;354:566.

87

Effect of Implementing PREG

- 96% (974 of 1012) women could have their contraception initiated same-day
 - vs. 58% prior to implementing PREG
- Only 24% (244 of 1012) needed a B-hCG
- Only 3.8% (38 of 1012) needed a 2nd appt.

Employ LARC Methods for Their <u>Evidence-Based Duration</u> (Do Not Consider FDA-labeling as Restrictive)

METHOD	TRADE NAME	FDA Label	EVIDENCE-BASED
Subdermal Implant	Nexplanon	3 years	4—5 years
52-mg LNG-IUD's	Mirena & Liletta	8 years	8 years
13.5 & 19.5 mg LNG-IUD's	Skyla & Kyleena	3 years	3 years
Copper IUD T-380A	Paragard	10 years	12 (?15) years

89

SUMMARY: Replace Traditional Practices With More Recent Evidence-Based Practices Remove "Unconscious Barriers"

- Counsel: in a PATIENT-centered approach
- Implement: easier access to contraception:
 - R/O pregnancy with "reasonable certainty"
 - Utilize telemedicine to initiate/continue contraception
 - Drive-up contraception
 - At home self-administered SubQ injectable Depo-Provera
 - Dispense a 1-YEAR supply of pills, patches, rings
 - Extended-use LARC methods