



# Adolescent Gynecology

A Case-Based Approach

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# Disclosures

- I wrote a chapter in this book, not being discussed today.
- No financial benefits/associations

# Objectives:

1. Discuss indications for the pelvic exam
2. Approach a dysmenorrhea differential
3. Explore menstrual irregularity interventions



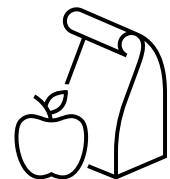
# Case of Painful Periods

# 16-year-old with abdominal & pelvic pain

- Pain used to start a day or two before menses and lasted through day 3 of bleeding
- For the last 3 months is having daily pain, but worst right before period

# 16 y abdominal & pelvic pain

- Menses: last 5 days, occur every 28-30 days
  - Heavy flow, changes pads 4-5x /day, no soak
- Other GU: +constipation, +pain with BM. No urinary symptoms
- Sexual hx: G0P0
  - 1 lifetime male partner, current
  - Never had STI testing
  - +pain with sex
- Impact: missed multiple school days/year; quit soccer team missed too many practices



# What's going on?

## Abdominal/pelvic pain

- Chronic Constipation
- Dysmenorrhea
- Pelvic Inflammatory Disease
- Endometriosis
- Behavioral Health component? \*

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- **Endometriosis**
- Behavioral Health component? \*



# Dysmenorrhea

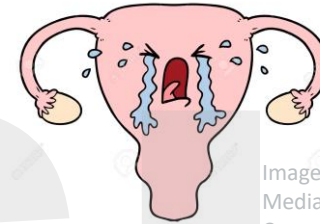


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- Common, usually primary etiology
- Nausea, vomiting, diarrhea, headaches, fatigue, dizziness, syncope
- **Studies note higher prostaglandin levels and/or prostaglandin receptors**
  - NSAIDs therefore first line
- Hormonal treatments: ovulation suppression & endometrial hypoplasia
- Timing of onset? \*

# Secondary Dysmenorrhea

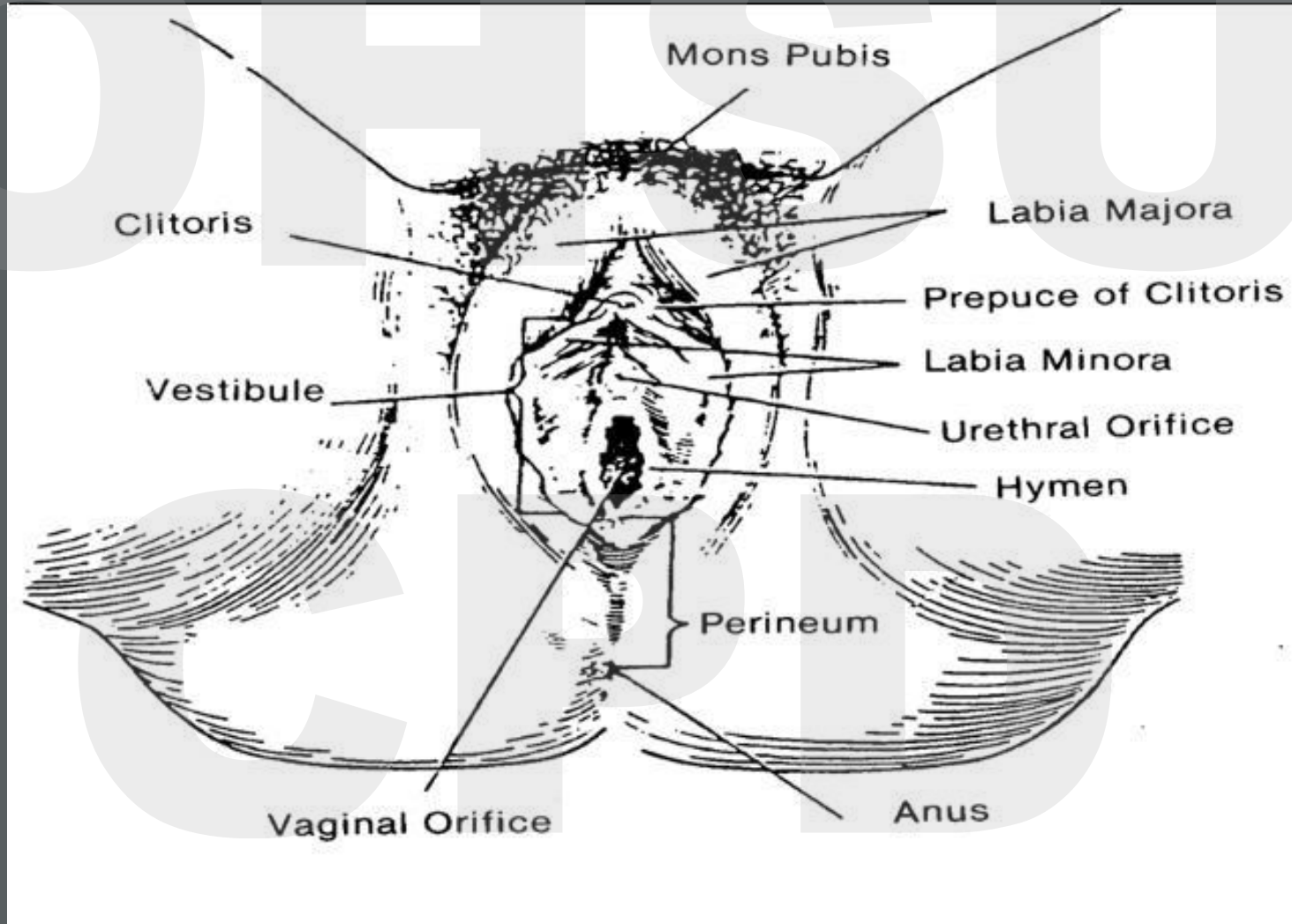
- Pelvic pathology to pain
- When trials of NSAIDs and Hormonal interventions (usually pills) fail
- Highest rare concerns: abdominal mass or genital outflow obstructive anomaly

# Exam for Dysmenorrhea\*

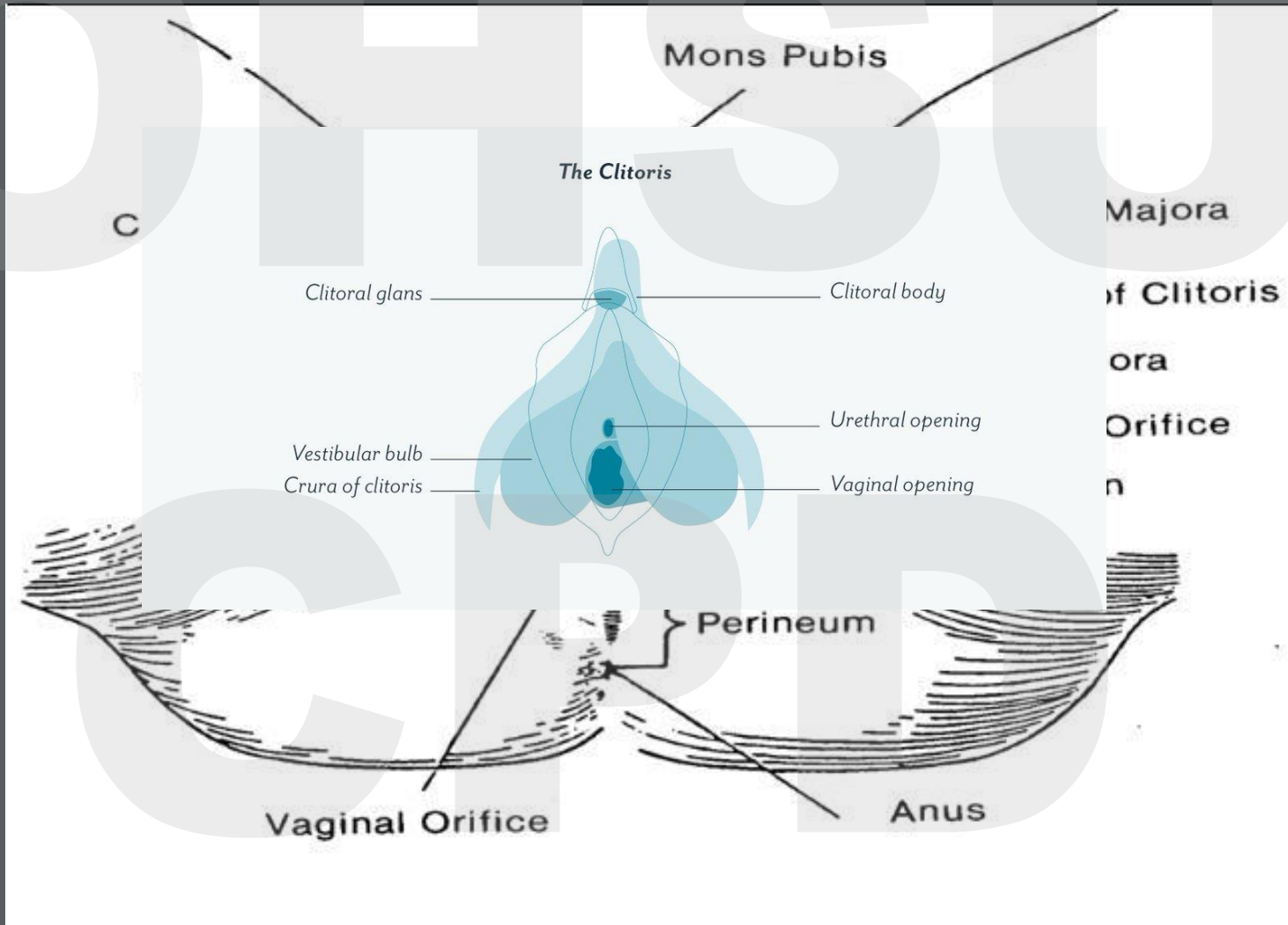
searching for secondary etiology

- Abdominal Exam
  - Pelvic exam\*
  - Urine & STI evaluations
- If concerned for genital tract obstruction ==>  
MRI pelvis

# External Genital Exam



# External Genital Exam



# Normal

- Labia minora hypertrophy
- Labial asymmetry



# Pelvic Exam – speculum/bimanual

## Bimanual exam

- When:
  - Pre pap smear
  - Pre IUD insertion
  - To check placement of current IUD
  - If concerned for PID or mass
  - Foreign body
- What: gloves/lube
  - 3 components
    - Cervical motion
    - Uterine compression
    - Ovarian palpation (bilaterally)

## Speculum exam

- When:
  - Pap smear
  - IUD procedure/check placement
  - Concern for cervical pathology
  - Foreign body
- What: gloves/lube/speculum/light
  - Determine strawberry cervix from normal ectropion \*
  - Vaginal rugae
  - Discharge assessment

# The Cervix

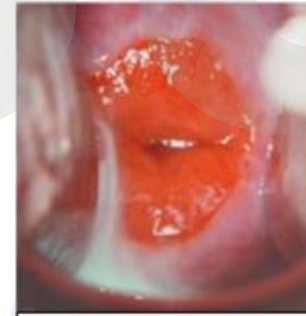
## Normal:



Normal cervix



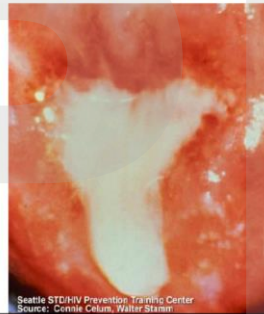
Small ectopy



Large ectopy

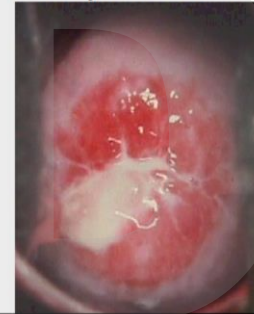
## Abnormal:

Gonococcal cervicitis



Seattle STD/HIV Prevention Training Center  
Source: Cervix Celum, Walter Starm

Chlamydial cervicitis





# Why are we suspicious of PID?

- Dyspareunia = pain with sex

## If bimanual exam +, would treat!

- Why? Because of fertility loss risk if we don't
- What? Triple Therapy

### Recommended Intramuscular or Oral Regimens for Pelvic Inflammatory Disease

**Ceftriaxone** 500 mg IM in a single dose\*

PLUS

**Doxycycline** 100 mg orally 2 times/day for 14 days

WITH

**Metronidazole** 500 mg orally 2 times/day for 14 days

 Centers for Disease Control and Prevention  
CDC 24/7: Saving Lives, Protecting People™

# Testing/Results

- STI testing
  - GC/CT neg
  - BV, trich, yeast neg
  - Mycoplasma neg
- Imaging?\*
- Ultrasound: normal uterus 6 x 3.5 x 2 cm; endometrial stripe 0.7 cm. Normal ovaries, no masses.

# Not feeling much better after PID treatment...

- Diagnosis?
- More studies?
- Referral?
- Treatments?

# Endometriosis likely?

- Presence of endometrial tissue outside of uterus
- Chronic cyclic and acyclic pain, progressive
  - **Acyclic pain (36-91%)**
  - Dyspareunia (14-25%)
  - GI complaints (2-46%)
- **Interference of pain with daily activities**
- Chronic pelvic pain **RESISTANT to NSAIDS & CHC treatment**
  - Early studies done in adults, 70% endometriosis lesions
  - 62% of adolescents with resistance to treatment had endometriosis lesions
- **Significant family history of endometriosis**

# Endometriosis likely

- Diagnosed by laparoscopy
  - Can remove some of lesions in OR
  - Classic "black powder burns" \*
  - Red/clear/white lesions
- No cure
- Treatment goals: minimize future sloughing & development of more lesions



# Endometriosis treatments

- NSAIDS + continuous CHC pills
- >18 yrs of age GnRH agonist considered prior to surgery. (+add back therapy = Aygestin, + Vit D + Ca)
- Progestin-only therapies\* – improve symptoms
- Surgery – improves symptoms
- No cure
- Treatment goals: minimize future sloughing & development of more lesions & preserve fertility



A case of irregular periods,  
acne, and hirsutism

# 17-year-old, premature adrenarche history and obesity presents with oligomenorrhea\*

Menarche 11

Adrenarche 7

Thelarche 9

BMI 97th percentile, generalized obesity

Open and closed comedones face + chest + back

Acanthosis nigricans of posterior neck & axillae + skin tags

Stubble noted of sideburns and chin. Coarse hair of abdomen midline. Coarse hair on arms

SMR 5 breasts and pubic hair

Normal estrogenized external female genitalia without clitoromegaly



# What are we worried about?

- Adrenal tumor
- Polycystic ovarian syndrome
- Maybe prolactinoma
- Maybe thyroid disorder

# Lab results

TSH 2.2 (normal)

Free T4 (high-normal)

17-OHProesterone 105 ng/dL (normal)

DHEA-S 206 microgram/dL (normal)

Androstenedione 1.8 ng/dL (normal)

Prolactin 14 ng/dL (normal)

**Total Testosterone 64 ng/dL (elevated)**

**Free testosterone 11.2 pg/mL (elevated)**

**HgB A1C 6.1%**

Cortisol normal

What does she have?

# PCOS work up

- Not <2\* years of menarche
- Rule out other causes \*
- ***Diagnosis: \****
  - 1. Irregular menses***
  - 2. Clinical or Laboratory Hyperandrogenism***
- Screen for related metabolic syndromes\*

# PCOS menstrual irregularities

## Oligomenorrhea

Menstrual frequency < every 3 months  
> 45 days between periods

## Polymenorrhea

Menstrual frequency under 20 days. (<20 days between periods)

## Abnormal Uterine Bleeding

>90 days of consecutive menses

## Primary Amenorrhea

- No menses by 15
- No menses 2-3 years post thelarche

# Family questions:

- How should periods be managed?
- Can acne and unwanted hair growth be addressed?
- How will this affect my fertility?

# Treatment

- **Control hyperandrogenism effects**
  - Hirsutism
    - Androgen blockers
      - Spironolactone
      - Finasteride
      - Topical eflornithine
    - Hair removal
  - Alopecia
  - Acne
    - Hormonal contraception
  - Insulin resistance treatment
    - Lifestyle mods
    - Metformin\*\*

- **Restoring menstrual function**
  - Fertility
  - Uterine health (quarterly menses)

Hormonal birth control

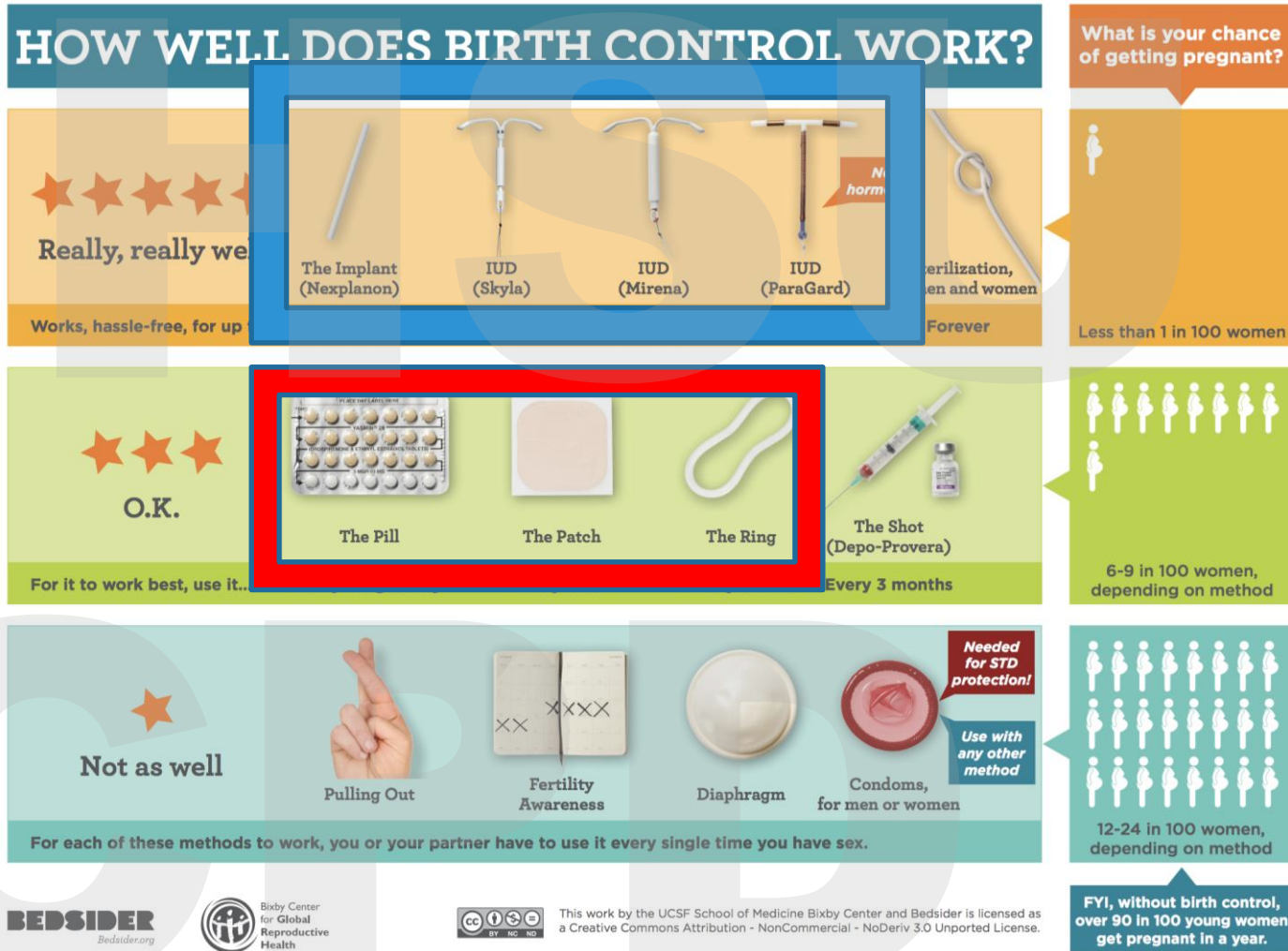


# Adolescent Contraception

# Contraceptive types

LARC – Long Acting Reversible Contraceptives

SARC – Short Acting Reversible Contraceptives





# Reasonably Certain Not Pregnant

Urine pregnancy  
test negative

No unprotected sex  
in last 2 weeks

Reasonably  
certain not  
pregnant

Never sexually  
active or no sex  
since LMP

Already on reliable  
BC method

# Emergency Contraception

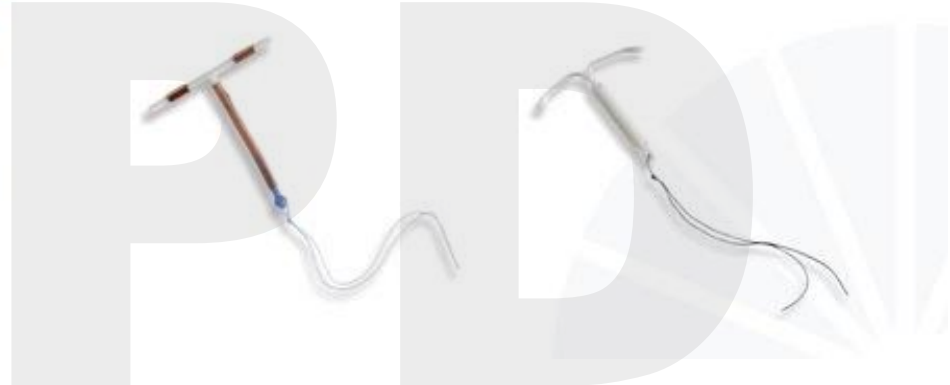
- If non-LARC provide Rx for EC & condoms

## Emergency Contraception



Factors that will affect the efficacy of the emergency contraception (EC) pill:

- LMP
- Timing of last instance of unprotected sex
- BMI



For Ella – if taking progesterone birth control\*

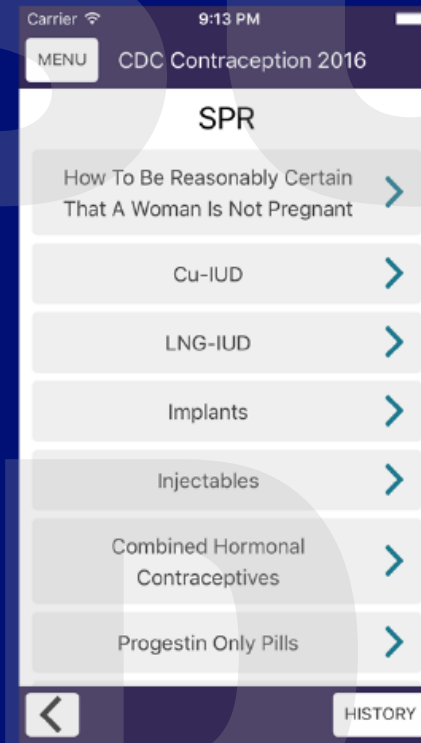
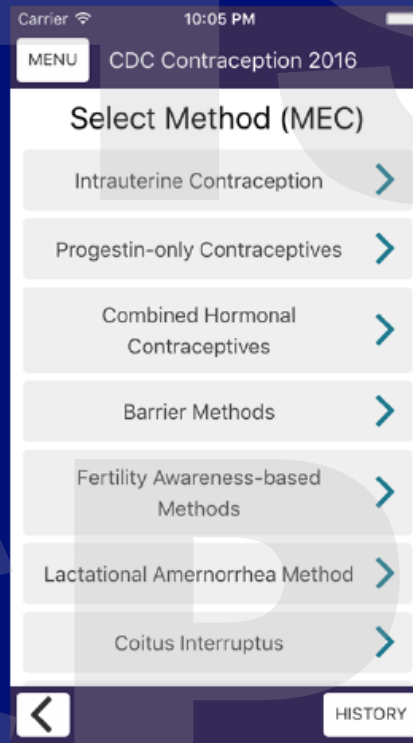
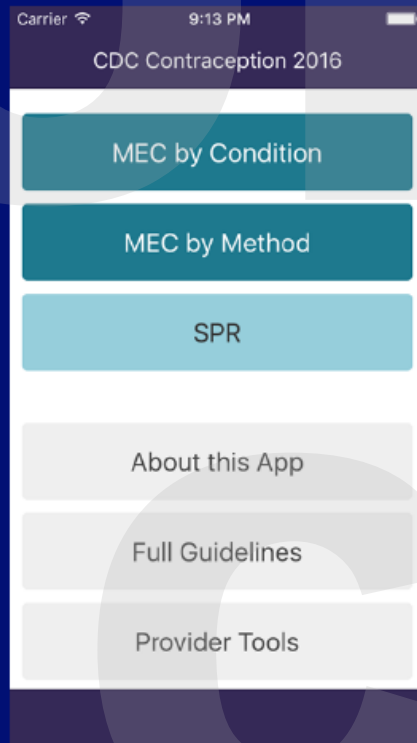


## Medical & Family Histories

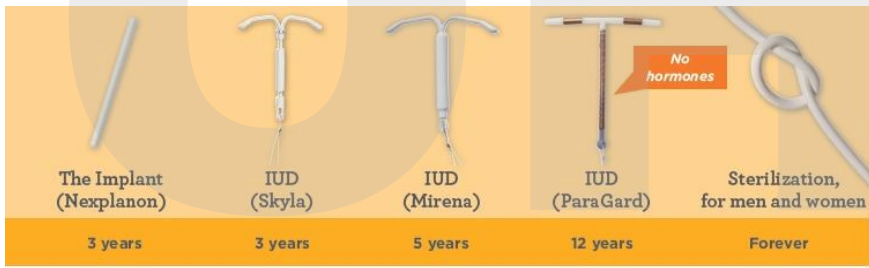
### U.S. MEC: Categories

- |   |   |
|---|---|
| 1 | No restriction for the use of the contraceptive method for a woman with that condition  |
| 2 | Advantages of using the method generally outweigh the theoretical or proven risks   |
| 3 | Theoretical or proven risks of the method usually outweigh the advantages – not usually recommended unless more appropriate methods are not available or acceptable |
| 4 | Unacceptable health risk if the contraceptive method is used by a woman with that condition   |

# 2016 U.S. MEC and SPR App

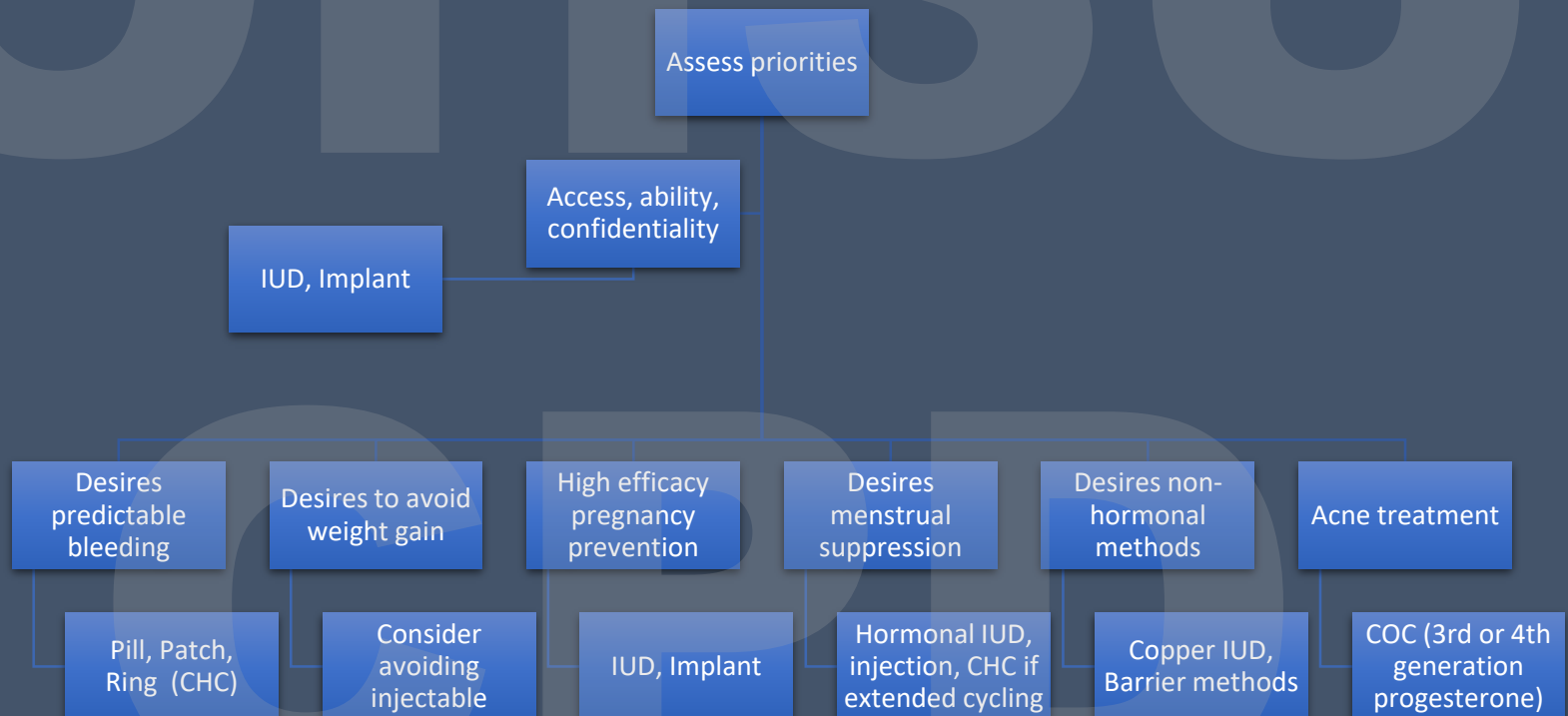


# Patient priorities and concerns



| Priorities for taking birth control                      |
|--|
| <input type="checkbox"/> Pregnancy Prevention            |
| <input type="checkbox"/> Menstrual suppression           |
| <input type="checkbox"/> Acne treatment                  |
| Concerns about taking birth control                      |
| <input type="checkbox"/> Lowest hormones possible        |
| <input type="checkbox"/> Weight gain concerns            |
| <input type="checkbox"/> Mood concerns                   |
| <input type="checkbox"/> Medication interaction concerns |

# Contraceptive Counseling Steps: Assess priorities



# Decision-making and Educational Tools



reproductive  
health  
access  
project

- <https://bedsider.org>
- <https://stayteen.org/videos>
- <https://powertodecide.org/sexual-health/your-sexual-health/find-your-method>
- For ordering on-hand office materials: <https://shop.powertodecide.org/educational-materials/posters.html>
- Comprehensive Client-Center Contraceptive Counseling Resource Guide by Oregon Health Authority:  
<https://www.oregon.gov/oha/PH/HealthyPeopleFamilies/ReproductiveSexualHealth/Documents/edmat/Client-CenterCounselingModelsandResources.pdf>
- Tia: Women's Health Advisor Cycle, mood & wellness tracker [Tia, Inc.](#)



**POWER  
TO DECIDE**

the campaign to prevent unplanned pregnancy





**Thank You**

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