Best Practices for Contraceptive Counseling: A Primer for the Primary Care Pediatrician
June 9, 2015

Kristine Schmitz, MD
Director of Medical Services, Healthy Generations Program

Brooke Bokor, MD, MPH
Division of Adolescent & Young Adult Medicine
Primary Teen Pregnancy Prevention: Let’s Talk About Sex

• Half of adolescents are engaging in sexual activity\(^1\)

• Unintended Teen Pregnancies\(^2\)
  – 46% due to non-use of contraception
  – 54% due to contraceptive failure
    • Effectiveness of method
    • Consistent and correct use

• Pediatricians are important providers of sexual health and contraception education\(^3,4\)

Martinez et al, 2011; Santelli et al., 2006; Ott et al, 2011; Jones et al, 2011
At the session’s end, participants will be able to ...

- Identify talking points and tools for contraceptive counseling in the primary care setting
- List the steps for obtaining Long-Acting Reversible Contraceptives (LARCs)
- Identify appropriate patients for co-management with a contraception specialist
Case: Angela

• Angela is a 16-year-old young in the office for a well adolescent exam

• You review the confidentiality and consent rules with her and her mother
  – In MD*, DC, and VA: All teens have the right to confidential reproductive health services including contraception and STI testing/treatment
  – Privacy extends to the medical record, but may not be kept by EOBs
Sexual History Taking

- Frame some questions in the third person
  - “Are you noticing that your peers/friends are starting to have sex?”
- Be concrete:
  - “Have you ever had sex?”
  - “Do you use condoms 100% or less than 100% of the time?”
- Be aware of judgmental questions and behaviors:
  - “you don’t have unprotected sex, do you?”
  - shaking your head as you ask questions
- Acknowledge positive behaviors:
  - establishing healthy relationships
  - proper use of contraceptives and safer sex methods
- Screen for intimate partner violence
  - “Has your partner ever forced you to do something sexually that you did not want to do, or tried to get you pregnant when you didn’t want to be?”
Case: Angela

• Angela has had sex three times with her current boyfriend and used condoms during two of those three encounters.

• After discussion with Angela, she would like to read more about available contraceptive options.

• She plans to discuss this with her mother.

• What resources do you provide her?
Long Acting Reversible Contraception (LARC): The Implant and IUDs

• LARC methods should be considered first-line contraceptive choices for adolescents

• Counsel about LARC methods at all visits with sexually active adolescents

• Providers should help make IUDs and the contraceptive implant accessible to adolescents

AAP (2014) and ACOG (2012) Recommendations
HOW WELL DOES BIRTH CONTROL WORK?

**Really, really well**
- The Implant (Nexplanon)
- IUD (Skyla)
- IUD (Mirena)
- IUD (ParaGard)
- Sterilization, for men and women

Works, hassle-free, for up to...
- 3 years
- 3 years
- 5 years
- 12 years
- Forever

Less than 1 in 100 women

**O.K.**
- The Pill
- The Patch
- The Ring
- The Shot (Depo-Provera)

For it to work best, use it...
- Every week
- Every month
- Every 3 months

6-9 in 100 women, depending on method

**Not as well**
- Pulling Out
- Fertility Awareness
- Diaphragm
- Condoms, for men or women

For each of these methods to work, you or your partner have to use it every single time you have sex.

12-24 in 100 women, depending on method

F.Y.I., without birth control, over 90 in 100 young women get pregnant in a year.
Pros and Cons of Different Contraceptive Methods

Here's a list of the many available types of contraception, and the pros and cons of using each.

Minimum effectiveness: 95%

Birth Control Pills
Not awkward: 5 tips for talking to anyone about sex and birth control

GET THE CONVERSATION STARTED
Case: Angela, age 16 years

• Angela returns for an appointment to start hormonal birth control.

• Angela was thinking about starting “the pill”

• What questions do you ask before beginning contraception counseling?
Case: Angela, age 16 years

• Angela returns for an appointment to start hormonal birth control.

• Angela was thinking about starting “the pill”

• What questions do you ask before beginning contraception counseling?
Case: Medical Eligibility Screening

• Angela has migraines (without aura) controlled with topiramate 50mg BID.

• She does not think anyone in her family has a history of blood clots.
Medical Eligibility Screening

Higher risk for hormonal contraception:

• History of blood clots, thrombophilia or high risk for DVT
• Active liver disease/hepatitis
• History of breast cancer
• Migraines with aura
• History of stroke (e.g., in sickle cell disease)
• Uncontrolled HTN (>160/100)
• DM with end organ damage
• Precancerous cervical changes
• Interfering medications: antiepileptics, HIV meds, rifampin, oral antifungals, St. John’s Wort

Not an issue:

• Obesity
• IBD
• Smoking <35 years old
• Migraines without aura
• Ovarian cysts
• Postpartum >6 weeks
• Fhx of VTE
Medical Eligibility Criteria for Contraceptive Use

2010

www.CDC.gov

### Summary Chart of U.S. Medical Eligibility Criteria for Contraceptive Use

<table>
<thead>
<tr>
<th>Condition</th>
<th>Category</th>
<th>Method</th>
<th>Series</th>
<th>Dose</th>
<th>Age</th>
<th>Impaired Immune Function</th>
<th>Contraindication</th>
<th>Precaution</th>
<th>Relative Contraindication</th>
</tr>
</thead>
<tbody>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

*Updated April 2010. This summary chart only contains a subset of the recommendations from the US MEC. For complete guidelines, see http://www.cdc.gov/reproductivehealth/evidence/evidence.htm.

Note: contraceptive methods are not mutually exclusive. A woman should use a contraceptive method that best meets her needs and for which she has evidence of effectiveness and low risk of adverse effects.

### iPhone/iPad App

New Mobile Tool Available for CDC’s U.S. Medical Eligibility Criteria for Contraceptive Use, 2010

Download the U.S. MEC application for iPhone/iPad from the iTunes App Store.

CDC has a new app which provides guidance for healthcare providers on the safety of contraceptive methods for people with certain medical conditions. The app is developed from the U.S. Medical Eligibility Criteria for Contraceptive Use, 2010 that includes more than 60 characteristics and medical conditions that may affect people seeking family planning services.
### Key:

1. No restriction (method can be used)
2. Advantages generally outweigh theoretical or proven risks
3. Theoretical or proven risks usually outweigh the advantages
4. Unacceptable health risk (method not to be used)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Sub-condition</th>
<th>Combined pill, patch, ring</th>
<th>Progestin-only pill</th>
<th>Injection</th>
<th>Implant</th>
<th>LNG-IUD</th>
<th>Copper-IUD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headaches</td>
<td></td>
<td>I</td>
<td>C</td>
<td>I</td>
<td>C</td>
<td>I</td>
<td>C</td>
</tr>
<tr>
<td>a) Non-migrainous</td>
<td></td>
<td>1*</td>
<td>2*</td>
<td>1*</td>
<td>1*</td>
<td>1*</td>
<td>1*</td>
</tr>
<tr>
<td>b) Migraine</td>
<td></td>
<td>2*</td>
<td>3*</td>
<td>1*</td>
<td>2*</td>
<td>2*</td>
<td>2*</td>
</tr>
<tr>
<td>i) without aura, age &lt;35</td>
<td></td>
<td>3*</td>
<td>4*</td>
<td>1*</td>
<td>2*</td>
<td>2*</td>
<td>2*</td>
</tr>
<tr>
<td>ii) without aura, age ≥35</td>
<td></td>
<td>3*</td>
<td>4*</td>
<td>2*</td>
<td>3*</td>
<td>2*</td>
<td>3*</td>
</tr>
<tr>
<td>iii) with aura, any age</td>
<td></td>
<td>4*</td>
<td>4*</td>
<td>3*</td>
<td>3*</td>
<td>3*</td>
<td>3*</td>
</tr>
</tbody>
</table>

### Drug Interactions

**Anticonvulsant therapy**

- a) Certain anticonvulsants (phenytoin, carbamazepine, barbiturates, primidone, topiramate, oxcarbazepine)
  - 3* 3* 1 2* 1 1
- b) Lamotrigine
  - 3* 1 1 1 1 1 1
<table>
<thead>
<tr>
<th>Condition</th>
<th>Sub-condition</th>
<th>Combined pill, patch, ring</th>
<th>Progestin-only pill</th>
<th>Injection</th>
<th>Implant</th>
<th>LNG-IUD</th>
<th>Copper-IUD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep venous thrombosis (DVT) / Pulmonary embolism (PE)</td>
<td>a) History of DVT/PE, not on anticoagulant therapy</td>
<td>I</td>
<td>C</td>
<td>I</td>
<td>C</td>
<td>I</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>i) higher risk for recurrent DVT/PE</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>ii) lower risk for recurrent DVT/PE</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>b) Acute DVT/PE</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>c) DVT/PE and established on anticoagulant therapy for at least 3 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>i) higher risk for recurrent DVT/PE</td>
<td>4*</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>ii) lower risk for recurrent DVT/PE</td>
<td>3*</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>d) Family history (first-degree relatives)</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>e) Major surgery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Case: Angela

- Angela is thinking about starting “the pill.”
- What other questions do you ask before beginning contraception counseling?
- What other contraceptive options do you discuss with her?
Shared Decision Making in Choosing a Method

• How far in the future might you want to have a child (again)?

• What is important to the patient in selecting a contraceptive method?
  – Efficacy?
  – Control in starting and stopping?
  – Frequency of administration?
  – Discreetness?
    • “Do we need to keep contraception use private from your parents or partners?”
    • “Does your partner support your decision about when or if you want to become pregnant?”
  – Side effects?
First Tier Efficacy

- The Implant (Nexplanon): 3 years
- IUD (Skyla): 3 years
- IUD (Mirena): 5 years
- IUD (ParaGard): 12 years
- Sterilization, for men and women: Forever

Really, really well: Works, hassle-free, for up to...

Less than 1 in 100 women
## Contraceptive CHOICE and Continuation rates

### Females aged 14-19 years (n=1099), Contraceptive CHOICE Project

<table>
<thead>
<tr>
<th>Method</th>
<th>% Choosing Method</th>
<th>Continuation Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC</td>
<td>69.3%</td>
<td>81%</td>
</tr>
<tr>
<td>Levonorgestrel IUS</td>
<td>30%</td>
<td>80.6%</td>
</tr>
<tr>
<td>Copper IUD</td>
<td>5%</td>
<td>75.6%</td>
</tr>
<tr>
<td>Implant</td>
<td>34.3%</td>
<td>82.2%</td>
</tr>
<tr>
<td>Non-LARC</td>
<td>30.6%</td>
<td>44%</td>
</tr>
<tr>
<td>DMPA</td>
<td>10.2%</td>
<td>47.3%</td>
</tr>
<tr>
<td>OCPs</td>
<td>13.3%</td>
<td>46.7%</td>
</tr>
<tr>
<td>Patch</td>
<td>2%</td>
<td>40.9%</td>
</tr>
<tr>
<td>Ring</td>
<td>5.1%</td>
<td>31%</td>
</tr>
</tbody>
</table>
### Adolescent Contraceptive Use

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC</td>
<td>53.2%</td>
</tr>
<tr>
<td>Male condom</td>
<td>20.0%</td>
</tr>
<tr>
<td>Other hormonal methods</td>
<td>16.1%</td>
</tr>
<tr>
<td>Other methods</td>
<td>7.6%</td>
</tr>
<tr>
<td>IUD</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

% of all contraceptive U.S. women ages 15-19 by method type (2012)
Barriers to LARC provision

- Patient knowledge
- Patient preference
- Concern about safety
  - Risk of PID
  - Nulliparous, adolescent, not monogamous
- Provider not trained in insertion
- LARC not available
- Cost

Tyler, Obstet Gynecol 2012;119:762
Madden, Contraception 2010;81:112.
Whitaker, Contraception 2008;78:211.
Mestad, Contraception 2011;84:493.
Shared Decision Making in Choosing a Method: **Implant**

- How far in the future might you want to have a child (again)?
  - ≥3 years

- What is important to the patient in selecting a contraceptive method?
  - Efficacy? 99.8%
  - Control in starting and stopping? **Ask for a 6 month commitment for bleeding pattern; small incision to remove; no delay in fertility return**
  - Frequency of administration? **Can be replaced same day every 3 years**
  - Discreetness? **Not visible; palpable only**
  - Side effects? **Progestin-only; no impact on bone density; few discontinue due to weight gain; unpredictable bleeding pattern; only slight burning of lidocaine with insertion**
Bleeding Patterns with Implant
First 2 Years

- Frequent: 6.7%
- Prolonged: 17.7%
- Amenorrhea: 22.2%
- Infrequent: 33.6%

Percentage of 90–day intervals
Shared Decision Making in Choosing a Method: Levonorgestrel IUD

• How far in the future might you want to have a child (again)?
  – ≥3 years

• What is important to the patient in selecting a contraceptive method?
  – Efficacy? 99.2%
  – Control in starting and stopping? Office placement/removal; no delay in fertility return
  – Frequency of administration? 3-5 years
  – Discreetness? Not visible; string palpable in vagina
  – Side effects? Cramping with insertion; Progestin-only: no impact on bone density; 50% amenorrhea within 2 years
  – Copper IUD: heavier cramps and bleeding; doesn’t stop ovulation; but lasts 10 years
Safety of IUDs for Teens

- IUDs and age <20: US Medical Eligibility Criteria Class 2
- IUDs and Expulsion
  - Evidence shows slightly increased risk of expulsion in younger women (5-22%)
- IUDs and infertility
  - No evidence that IUDs cause later infertility
  - Infertility associated with gonorrhea and Chlamydia
- IUDs and STIs
  - No evidence that IUDs increase risk of STI acquisition
  - Women with current cervicitis, chlamydial infection, gonorrhea should not start an IUD (US MEC 4)
  - Women with a very high individual likelihood of exposure to chlamydial infection or gonorrhea generally should not start an IUD (US MEC 3)
Second Tier Efficacy
92-96%
Shared Decision Making in Choosing a Method:
Depot Medroxyprogesterone Acetate (DMPA)

• How far in the future might you want to have a child (again)?
  – ≥3-12 months

• What is important to the patient in selecting a contraceptive method?
  – Efficacy? 94%
  – Control in starting and stopping? Office placement; fertility may take 9-12 months to resume
  – Frequency of administration? 3 months
  – Discreetness? May need to pick up from pharmacy first
  – Side effects? Progestin-only: temporary osteopenia; unpredictable bleeding; weight gain
DMPA Side Effects

- Menstrual disturbances
  - Incidence 70%
  - Decreases with each injection
- Weight Gain
  - 4-5 pounds over those with IUD
  - May be more in obese
- Bone Mineral Density
  - Loss greatest in first 2 years
  - Regained when DMPA stopped, especially in adolescents
- Delay in return to fertility
  - Median 9-10 months to conception
Shared Decision Making in Choosing a Method:
Combined estrogen-progestin Vaginal Ring

• How far in the future might you want to have a child (again)?
  – ≥1 month

• What is important to the patient in selecting a contraceptive method?
  – Efficacy? 91%
  – Control in starting and stopping? Patient dependent; may take out for 3hrs; no delay in fertility return
  – Frequency of administration? 3 weeks in, 1 wk out
  – Discreetness? May be noticed during sex
  – Side effects? Vaginal irritation
Shared Decision Making in Choosing a Method: Combined estrogen-progestin Patch

• How far in the future might you want to have a child (again)?
  – ≥1 week

• What is important to the patient in selecting a contraceptive method?
  – Efficacy? 91%
  – Control in starting and stopping? Patient dependent; no delay in fertility return
  – Frequency of administration? weekly
  – Discreetness? Visible on skin
  – Side effects? Skin irritation from adhesive; theoretic risk of VTE higher due to bypass of liver filtration
Shared Decision Making in Choosing a Method: Combined estrogen-progestin oral pill

- How far in the future might you want to have a child (again)?
  - \( \geq 1 \) week

- What is important to the patient in selecting a contraceptive method?
  - Efficacy? 91%
  - Control in starting and stopping? Patient dependent; no delay in fertility return
  - Frequency of administration? Daily
  - Discreetness? Ensure pill storage accessible
  - Side effects? Consider pill at night if nausea; mood changes and
Standard Counseling on Safety

• Review serious but rare side effects
  – High blood pressure
  – Formation of blood clots

• Instruct patient to stop medication and notify provider immediately with any of the following ACHES symptoms:
  – Abdominal Pain (severe)
  – Chest Pain
  – Headache (severe)
  – Eye problems, visual disturbances
  – Severe localized leg pain (calf or thigh)

• Review disadvantages
  – Condoms still required for STI protection
  – Few months for body to equilibrate hormones
  – Potential for benign liver masses
Case: Angela

• Angela now wants to get the DMPA injection (Depo-Provera®) until she can be referred to get the Implant placed

• Do you need to perform any exam or test?
Do Not Defer Contraception Initiation

- **Pelvic exam:** Not necessary unless…
  - she has STI symptoms
  - provider is going to place IUD

- **Pap smear:** Every 3 years starting at age 21 years age, unless immunocompromised

ACOG, 2009
Case: Angela

- Angela informs you that she last had unprotected sex two weeks ago.
- Her urine pregnancy test is negative.
- Her LMP was 3 weeks ago.
- When can you give her the first injection?
Patient requests new method of contraception

First day of LMP five or fewer days ago?

Yes

Urine pregnancy test negative
Unprotected sex since LMP?

No

Initiate method today; advise use of backup method during first week

Yes

Five or fewer days ago

No

Offer hormonal EC today

Yes

Advise that negative pregnancy test is not conclusive

Patient wants to start new method today?

No

Provide prescription for chosen method

Yes

Initiate method today
Patient requests new method of contraception

First day of LMP five or fewer days ago?

No

Urine pregnancy test negative
Unprotected sex since LMP?

Yes

Five or fewer days ago

No

Advise that negative pregnancy test is not conclusive

Patient wants to start new method today?

Yes

Initiate method today
The Pregnant Teenager

**Counseling:**
- Determine teen’s intentions and thoughts
- Provide education regarding all options
- Provide referrals for prenatal care, adoption information, and/or termination services
- Ensure you have a way to reach the teen confidentially
- Discuss to whom she can disclose this (parent, partner, etc)
- Schedule follow up

**Medical:**
- Determine last menstrual period
- Do complete STI testing
- Start Prenatal vitamins
- Review medication list, make changes as appropriate
- Counsel against alcohol/drugs/smoking
Benefits Beyond Contraception - Consider co-management with a specialist

- Menstrual regulation for hygienic assistance
- Dysmenorrhea and menorrhagia control
- Functional ovarian cyst prevention
- Cancer risk (neutral to favorable)
- PCOS treatment
- Acne and Hirsutism improvement
- Endometriosis treatment

...and other benefits with extended cycling
Appropriate patients for co-management with a contraception specialist

• Implant placement
• IUD placement
• Patients with complex medication regimens or medical problems:
  – Seizure disorder
  – Uncontrolled hypertension
  – HIV
  – Lupus
  – DVT history
Referrals

• **Implant Placement, Contraception and Menstrual Co-Management**
  Adolescent Health Center, 202-476-5464, ages 12-21 years
  – Nexplanon placement: same day placement possible; ideal for patient to be informed about method in advance
  – Have patient specify “nexplanon” or “implant placement” to ensure they are scheduled with the correct providers
  – Drs. Bokor, Malcolm, Woodward, Someshwar, & Addison (all ♀)
  – No IUD placements at this time

• **IUD Placements**
  – Under anesthesia (implants, too), Children’s National Gynecologic Surgery Division, Dr. Gomez-Lobo, 202-877-4099
  – Not under anesthesia, Washington Hospital Center GYN, Dr. Gomez-Lobo, 202-877-4099
LARC Webinars

The LARC Program offers free accredited live monthly webinars addressing a wide range of topics related to the provision of Long–Acting Reversible Contraception (LARC). Please visit the ACOG Webinar Registration Site to register for our upcoming webinars.
Resources

• AAP Policy Statement Contraception for Adolescents. Sept 2014
  http://pediatrics.aappublications.org/content/134/4/e1244.full
• Guttmacher Institute http://www.guttmacher.org/statecenter/
• ACOG.org
• Bedsider.org
• YoungWomensHealth.org
• National Campaign to Prevent Teen and Unintended Pregnancy http://thenationalcampaign.org/
• Bixby Center for Global Reproductive Health http://bixbycenter.ucsf.edu