How to Help Your Teen Patients Choose the Right Method of Contraception
Teen Pregnancy Prevention and the Role of the Pediatrician

Unlike pregnancies in older women, the vast majority of teen pregnancies are unintended. The current downward trend of teen pregnancy has been linked to decreases in sexual activity and increased use of birth control. Teens, however, are less likely than adult women to use the most effective contraceptives (intrauterine devices (IUD) and implant) and instead rely on birth control pills, condoms and withdrawal. Very few use both condoms and a prescription contraceptive.

The Centers for Disease Control (CDC) has identified teen pregnancy as a “Winnable Battle” and recommends strengthening effective clinical interventions and promoting the use of contraception, including IUDs and contraceptive implants, to reduce teen pregnancy in the United States. Poor access to contraceptive counseling and highly effective contraceptives is a barrier for many teens. Pediatricians are well positioned as trusted health care providers to provide accurate information to patients and their families in a developmentally appropriate matter and to prescribe or provide many contraceptives on site.

Counseling and Provision of Contraception

Clinicians should address an adolescent’s sexual activity status at each well visit and initiate pregnancy prevention efforts or preconception care, as appropriate. The CDC, along with the American Congress of Obstetricians and Gynecologists, recommends assessing pregnancy intention in females of reproductive age. As important as this discussion is the follow through. Same-day access to method of choice, including IUDs and contraceptive implants, decreases risk of unintended pregnancy.

The following elements should be assessed during an encounter for contraceptive counseling:

- Menstrual history
- Past medical history
- Problem list
- Current medications
- Sexual history
- Obstetric history
- Contraception history
- Family medical history
- Body mass index
- Weight
- Blood pressure

Contraception counseling should be respectful of patients’ and families’ unique cultural traditions, be non-coercive and utilize shared decision making that prioritizes the patient’s values and priorities. Patients should be educated about all methods of contraception in an efficacy-based order.

Respect for patients’ reproductive autonomy includes access to all available methods. Patients should also be counseled that they may choose to switch methods or stop a method. Adolescents who want to discontinue the use of an implant or an IUD should not face undue barriers to removal. Removals, when requested, should be conducted as expeditiously as possible.

Methods of Contraception

Abstinence is 100 percent effective in preventing pregnancy and sexually transmitted infections and is an important part of contraceptive counseling. However, over time, perfect adherence to abstinence is low. Given their efficacy, safety and ease of use, the American Academy of Pediatrics recommends that IUDs and the contraceptive implant be considered first-line choices for adolescents.
### Available Contraceptive Methods in Order of Efficacy:

<table>
<thead>
<tr>
<th>TYPE</th>
<th>WHAT IT IS</th>
<th>EFFECTIVENESS WITH TYPICAL USE</th>
<th>DOSING</th>
<th>COMMON SIDE EFFECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nexplanon® implant</td>
<td>Small rod placed into the upper arm; contains etonogestrel, a progestin</td>
<td>&gt; 99%</td>
<td>3 years</td>
<td>Irregular bleeding</td>
</tr>
<tr>
<td>Hormonal IUD</td>
<td>Small T-shaped device placed into the uterus, contains levonorgestrel, a progestin</td>
<td>&gt; 99%</td>
<td>Depending on device, between 3-5 years</td>
<td>Irregular bleeding, cramping</td>
</tr>
<tr>
<td>Copper IUD</td>
<td>Small T-shaped device placed into the uterus, contains copper</td>
<td>&gt; 99%</td>
<td>10 years</td>
<td>Heavier bleeding, cramping</td>
</tr>
<tr>
<td>Depo Provera® injection</td>
<td>IM or SQ progestin injection</td>
<td>94%</td>
<td>3 months</td>
<td>Irregular bleeding, weight gain, declines in bone density</td>
</tr>
<tr>
<td>Birth control pills</td>
<td>Oral contraceptive containing estrogen and progestin, or progestin only</td>
<td>91%</td>
<td>Daily</td>
<td>Combination hormonal contraceptives:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Irregular bleeding, breast tenderness, nausea</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Progestin only pill:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Irregular bleeding</td>
</tr>
<tr>
<td>Contraceptive vaginal ring</td>
<td>Small flexible ring placed in the vagina by patient, contains estrogen and progestin</td>
<td>91%</td>
<td>In place for three weeks and removed during fourth week</td>
<td>Irregular bleeding, breast tenderness, nausea</td>
</tr>
<tr>
<td>Contraceptive patch</td>
<td>Thin flexible adhesive patch, contains estrogen and progestin</td>
<td>91%</td>
<td>Replace patch weekly for three weeks and remove during fourth week</td>
<td>Irregular bleeding, breast tenderness, nausea</td>
</tr>
<tr>
<td>Male condoms</td>
<td>Thin covering worn by the male during sex</td>
<td>82%</td>
<td>Should be used during every sexual encounter</td>
<td></td>
</tr>
</tbody>
</table>

All sexually active adolescents should be counseled about behaviors to reduce sexually transmitted infections, including secondary abstinence and monogamy, the importance of screening for HIV and other sexually transmitted infections, and the importance of consistent condom use.

Sexually active females should be screened annually for gonorrhea and Chlamydia, and for other infections such as HIV, syphilis, and Trichomonas as indicated. Pediatric providers should promote vaccination against human papillomavirus (HPV) and Hepatitis B.
Evidence Based Practice Guidline – Contraception

Adolescent indicates she is sexually active or considering sexual activity

→ “Do you want to become pregnant in the next year?”

Yes → Preconception care

No → Unsere

→ “Are you interested in starting a (new) birth control method?”

No → Continue current method and/or preconception care

Yes → Are you reasonably certain she is not pregnant?

No → Unprotected sex in previous 5 days?

Yes → Offer emergency contraceptive

No → Option counseling

→ Asses medical eligibility

→ Efficacy-based contraceptive counseling

Most to least effective

Progestin-only injectable contraceptive

Implant

IUDs

Combination hormonal contraceptives (pill/patch/ring)

Can method be provided immediately?

No → 1. Schedule patient for contraceptive counseling or procedure or refer to contraception provider.

2. Start/offer bridging contraceptive*


Yes → 1. Complete placement/give injection/provide EC


3. Schedule follow-up:
   a. Implant – None required, consider 1-3 months
   b. IUD – None required, consider 1-2 months
   c. Injectable – 11-13 weeks
   d. Pill/patch/ring – None required, consider 6-12 weeks

4. If ORANGE PATH – Recommend pregnancy test in 3 weeks if she hasn’t had a withdrawal bleed.

5. For all methods except ulipristal acetate, advise patient to continue previous method (if applicable), and use condoms and/or abstain from sexual intercourse for 7 days.

6. If ulipristal acetate provided, advise patient to start contraception in 5 days, and to use condoms and/or abstain from sexual intercourse for 12 days.

→ Are you reasonably certain she is not pregnant?

→ Pregnancy test

Positive

Options counseling

→ Do you want to become pregnant in the next year?

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1-5: See following appendix reference.
Nationwide Children’s Hospital’s Young Women’s Contraceptive Services/BC4Teens Program

BC4Teens at Nationwide Children’s offers comprehensive, outpatient contraceptive services for adolescent girls and young women up to age 22. A full spectrum of family planning services is provided, including:

- Contraception counseling
- Access to contraceptives in a teen-friendly environment
- Same-day LARC (contraceptive implant, hormonal and non-hormonal IUDs) or method of choice for all medically eligible females
- Testing and treatment of sexually transmitted infections

Refer a patient online at NationwideChildrens.org/BC4Teens or by phone at (614) 722-6200. Evening and same-day appointments. A parent or guardian must be present during a minor’s first visit.

Appendix 1.

Preconception Care

When discussing pregnancy with an adolescent, consider the following:

- A dialogue regarding the patient’s readiness for pregnancy
- An evaluation of her overall health and opportunities for improving her health
- Education about the significant impact that social, environmental, occupational, behavioral, and genetic factors have in pregnancy
- Identification of women at high risks for an adverse pregnancy outcome

To optimize health and reduce risks prior to conception, focus on the following health factors:

- Undiagnosed, untreated or poorly controlled medical conditions
- Immunization history
- Medication and radiation exposure in early pregnancy
- Nutritional issues
- Family history and genetic risk
- Tobacco and substance use and other high-risk behaviors
- Occupational and environmental exposures
- Social issues
- Mental health issues

Reference: Committee on Gynecologic Practice. ACOG Committee Opinion: The Importance of Preconception Care in the Continuum of Women’s Health Care. 313, 2015.

Appendix 2.

How to be reasonably certain that a woman is not pregnant

A contraceptive method may be started at any time in a woman’s menstrual cycle as long as a health care provider is reasonably certain she is not pregnant. A provider can be reasonably certain a woman is not pregnant if she meets any of the following criteria:

- is ≤ seven days after the start of normal menses
- has not had sexual intercourse since the start of last normal menses
- has been correctly and consistently using a reliable method of contraception
- is ≤ seven days after spontaneous of induced abortion
- is within four weeks postpartum, or is fully or nearly fully breastfeeding (exclusively breastfeeding or the vast majority [≥ 85%] of feeds are breastfeeds), amenorrheic, and < six months postpartum

Appendix 3.
Counseling about pregnancy options

Pregnant adolescents have the right to be informed and counseled on all legal pregnancy options. Pediatricians should take the following steps:

1. Inform the pregnant adolescent of the options, which include carrying the pregnancy to delivery and raising the infant, carrying the pregnancy to delivery and making an adoption or kinship care plan, or terminating the pregnancy.
2. Be prepared to provide a pregnant adolescent with basic, accurate information about each of these options in a developmentally appropriate manner, support her in the decision-making process and assist in making connections with community resources that will provide her with quality services during and after her pregnancy.
3. Examine their own beliefs and values to determine if they can provide nonjudgmental, factual pregnancy options counseling. If they cannot, they should facilitate a prompt referral for counseling by another knowledgeable professional in their practice setting or community who is willing to have such discussions with adolescent patients.


Appendix 4.
Emergency Contraception

Emergency contraception (EC) should be offered to patients who have experienced unprotected or underprotected sex within the last five days (120 hours) who do not desire a pregnancy.

- The copper IUD is the most effective EC and is a highly effective ongoing contraceptive method after placement.
- Oral EC formulations include: ulipristal acetate (UPA) 30mg and levonorgestrel (LNG) 1.5 mg.
- Evidence suggests that UPA may be more effective compared to LNG and in particular, more effective than LNG 72-120 hours after the sexual encounter, and may be more effective in patients weighing more than 75 kg.
- Use of UPA may diminish the effectiveness of a concurrently used hormonal method, and start of a hormonal contraceptive within a day of UPA may make UPA less effective.
- It is recommended that a woman start or resume hormonal contraception no sooner than five days after use of UPA, and that she abstains from sexual intercourse or uses a barrier method for the next seven days or until her next menses, whichever comes first.
- A pregnancy test is recommended if a woman has not resumed menses within three weeks of use of EC.
- Decisions about which EC to use, including potential delay of chosen contraceptive method, should be balanced with the risk of a patient not starting her chosen contraceptive method and the risk of pregnancy.

Appendix 5.
Assessing Medical Eligibility for Contraceptive Use

A healthy adolescent female who has normal menstruation, no active or previous medical conditions or congenital anomalies, has never been pregnant, takes no medications or supplements, and does not have a sexually transmitted infection is eligible for any reversible contraceptive method.

Categories for classifying hormonal contraceptives and intrauterine devices

1 = A condition for which there is no restriction for the use of the contraceptive method.
2 = A condition for which the advantages of using the method generally outweigh the theoretical or proven risks.
3 = A condition for which the theoretical or proven risks usually outweigh the advantages of using the method.
4 = A condition that represents an unacceptable health risk if the contraceptive method is used.

Abbreviations

Cu IUD – Copper IUD
LNG IUD – Levonorgestrel IUD
DMPA – depot medroxyprogesterone acetate
CHC – combination hormonal contraceptives
POP – progestin only pill

Does patient have any of the following conditions?

A. Migraine with aura (Category 4* for CHC) = consider an option other than CHC
B. Current Pelvic Inflammatory Disease, purulent cervicitis, chlamydial infection, or gonorrheal infection (Category 4 for Cu-IUD and LNG-IUD) = consider an option other than IUD
C. Certain anticonvulsants
   • phenytoin, carbamazepine, barbiturates, primidone, topiramate, and oxcarbazepine (Category 3* for CHC, POP) = consider an option other than CHC and POP
   • lamotrigine (Category 3* for CHC) = consider an option other than CHC
D. History of deep venous thrombosis* (i.e., DVT, PE)
   • history of DVT/PE: (Category 4/4* for CHC for higher risk recurrent DVT/PE, Category 3/3* for CHC for lower risk recurrent DVT/PE) = consider an option other than CHC
E. History of cerebrovascular accident (Category 4 for CHC, Category 3 for DMPA) = consider an option other than CHC and DMPA
F. Hypertension = consider an option other than CHC [for all bullets below] and DMPA [Bullet 2,3]
   • for adequately controlled hypertension, and Systolic 140-159 or diastolic 90-99 (Category 3* for CHC)
   • for systolic ≥160 or diastolic ≥ 100 (Category 4* for CHC, Category 3* for DMPA)
   • for vascular disease (Category 4* for CHC, Category 3* for DMPA)
G. Known thrombogenic mutations (e.g., factor V Leiden; prothrombin mutation; and protein S, protein C, and antithrombin deficiencies)* (Category 4* for CHC) = consider an option other than CHC
H. Post-partum* < 21 days (Category 4* for CHCs) = consider an option other than CHC

(* indicates please see complete guideline for a clarification of this classification)

If an adolescent female has a known or suspected medical condition or takes medications other than listed above, the provider should further assess medical eligibility for contraceptive use prior to initiation.

References:


