Body System: Pediatrics		
Session Topic: Adolescent Contraception Management		
Educational Format		**Faculty Expertise Required**
REQUIRED	Interactive Lecture	Expertise in the field of study. Experience teaching in the field of study is desired. Preferred experience with audience response systems (ARS). Utilizing polling questions and engaging the learners in Q&A during the final 15 minutes of the session are required.
OPTIONAL	Problem-Based Learning (PBL)	Expertise teaching highly interactive, small group learning environments. Case-based, with experience developing and teaching case scenarios for simulation labs preferred. Other workshop-oriented designs may be accommodated. A typical PBL room is set for 50-100 participants, with 7-8 each per round table. Please describe your interest and plan for teaching a PBL on your proposal form.

Professional Practice Gap	**Learning Objective(s) that will close the gap and meet the need**	**Outcome Being Measured**
• Knowledge gaps regarding the trends in contraceptive use (including medical devices) among sexually active patients. Research indicates that a large percentage of adolescent patients would benefit from birth control counseling, however do not request it. • Due to the rise in emergency contraception use and recent FDA approval of OTC options, family physicians may need additional training in order to answer questions and offer accurate information to their patients. • Knowledge and performance gap in providing adequate management of contraception methods and patient counseling for women with chronic medical conditions.	1. Compare and contrast recommended forms of contraception for adolescent use. 2. Educate adolescent patients on responsible sexual behaviors to decrease the risk of unintended pregnancy and sexually transmitted infections. 3. Counsel patients on the appropriate use and access to emergency contraception, including advanced provision prescription. 4. Locate state and local law information defining confidentiality for adolescents with regard to reproductive health care services.	Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement presented practice recommendations.

• As contraception use tends to vary across certain patient populations, family physicians should be prepared to exercise cultural competency in treating patients with different contraception needs. • Knowledge and practice gaps with regard to switching contraception methods; proficiency in the use of LARC (e.g. IUDs, injections, implants); understanding of "quick start" with Depo-Provera; if/when pap smear is appropriate before contraceptive use; cultural competencies with regard to contraception, including special age-related scenarios; providing better patient education; emergency contraception; and handling special situations • Primary care physicians attitudes may be a barrier to increasing adolescents access to IUDs		

ACGME Core Competencies Addressed (select all that apply)			
X	Medical Knowledge		Patient Care
X	Interpersonal and Communication Skills		Practice-Based Learning and Improvement
	Professionalism		Systems-Based Practice

Faculty Instructional Goals

Faculty play a vital role in assisting the AAFP to achieve its mission by providing high-quality, innovative education for physicians, residents and medical students that will encompass the art, science, evidence and socio-economics of family medicine and to support the pursuit of lifelong learning. By achieving the instructional goals provided, faculty will facilitate the application of new knowledge and skills gained by learners to practice, so that they may optimize care provided to their patients.

- Provide up to 3 evidence-based recommended practice changes that can be immediately implemented, at the conclusion of the session; including SORT taxonomy & reference citations

- Facilitate learner engagement during the session
- Address related practice barriers to foster optimal patient management
- Provide recommended journal resources and tools, during the session, from the American Family Physician (AFP), Family Practice Management (FPM), and Familydoctor.org patient resources; those listed in the References section below are a good place to start
    - Visit http://www.aafp.org/journals for additional resources
    - Visit http://familydoctor.org for patient education and resources
- Provide recommendations regarding forms of contraception for adolescent use.
- Provide strategies and resources to educate adolescent patients on responsible sexual behaviors to decrease the risk of unintended pregnancy and sexually transmitted infections.
- Provide strategies and resources to counsel patients on the appropriate use and access to emergency contraception, including advanced provision prescription.
- Provide recommendations such that learners would be able to locate state and local law information defining confidentiality for adolescents with regard to reproductive health care services.

Needs Assessment

Adolescents are at high risk for unintended pregnancy and are among the group of those more likely to become pregnant unintentionally. The United States has the highest rate of teen pregnancy among high income countries, with 625,000 teen pregnancies reported annually.[1-3]

Unintended adolescent pregnancy is associated with adverse physical and psychological outcomes for mother and child, lower lifelong socioeconomic and educational achievement, and higher medical costs. Births among adolescents have been decreasing over time in most countries, including the United States, primarily because of lower rates of sexual activity and higher rates of contraception use. However, the rate of unintended adolescent pregnancy in the United States is higher than in many other industrialized countries and disproportionately affects minority and impoverished youth.[4]

The American Academy of Family Physicians (AAFP) and the Society for Adolescent Health and Medicine recognize the importance of reducing the incidence of unintended teen pregnancies.[5,6] An AAFP policy states that family physicians should provide appropriate guidance and counseling to educate patients (and family members) about responsible sexual behaviors that decrease the risk of unplanned pregnancy and transmission of STIs.[5] This information should include the efficacy and availability of long acting reversible contraception (LARC) and emergency contraception.[5,6] Efforts to reduce teen pregnancy should also include improving access to highly effective contraception in pediatric primary care.[2]

Practice Gap

Eighty-two percent of teen pregnancies are unplanned and result from contraceptive misuse or nonuse. Approximately 10% of sexually active high school students use withdrawal method only - about the same percentage as those who use no method of contraception. Family physicians are

in an ideal position to educate teens and provide access to other, more reliable and effective methods of contraception.[7]

LARC methods (including Intrauterine devices (IUDs) and contraceptive implants), have shown to be safe and effective (99% efficacy) for use in adolescents, including use as emergency contraception following unprotected sexual intercourse.[8,9] However, in the United States, health care providers and patients alike continue to have misconceptions and inadequate information about LARC and emergency contraception which negatively impacts its access and use. Physician attitudes may be a barrier to increasing adolescents access to IUDs.[10,11] Adolescent health care providers should be a resource for proactively providing accurate medical information.[2]

A 2012 American College of Obstetricians and Gynecologists (ACOG) committee opinion states that IUDs do not increase the risk of pelvic inflammatory disease or decrease future fertility in adolescents, and studies on the effectiveness of LARC found the IUD to be more effective than the contraceptive pill, patch or ring for prevention of pregnancy, including in adolescents.[12] Furthermore, the ACOG and American Academy of Pediatrics (AAP) recommend LARC as a first line contraceptive for adolescents. Despite the increased use of LARC over the past decade, less than 5% of adolescents using contraception choose a LARC method.[2]

The Centers for Disease Control and Prevention recommends the use of family planning services to adolescents with assurances of confidentiality (in the context of relevant law).[12] Concerns about confidentiality may create barriers to open communication between patient and physicians, and may discourage adolescents from seeking necessary medical care and counseling. Family physicians should communicate respect for the privacy of the adolescent patients they see, encourage them to involve their parents or guardians in health care decisions, and make an effort to maintain confidentiality including consideration for electronic health record configuration to meet state standards regarding confidentiality.[13] Provision of confidentiality as aligned with state law, and education and access to LARC stands to significantly impact the teen pregnancy rate in the United States.

Physicians may improve their contraception management by engaging in continuing medical education that provides practical integration of current evidence-based guidelines and recommendations into their standards of care, including, but not limited to the following:[4,9,12,14-16]

- Among adolescents, educational interventions increase reported condom use at most recent intercourse (number needed to treat [NNT] = 21; Strength of Recommendation [SOR]: B, based on inconsistent or limited-quality patient-oriented evidence).
- Contraceptive-promoting interventions increase use of hormonal contraception (NNT = 5; SOR: A, based on consistent, good-quality patient-oriented evidence). Combining these interventions lowers the risk of unintended pregnancy compared with existing conventional population-wide activities alone1 (NNT = 25; SOR: B, based on inconsistent or limited-quality patient-oriented evidence).
- If a patient's pregnancy status is uncertain, clinicians may consider same-day start of a nonintrauterine method to provide immediate coverage, and should order follow-up pregnancy testing two to four weeks later.

- Prescription of hormonal contraceptives should preferentially cover one year's supply to decrease barriers to care.
- Family planning services should be offered to adolescents with assurances of confidentiality, in the context of applicable statelaw.
- Intrauterine devices and contraceptive implants are safe and effective for postmenarchal adolescents.
- The copper intrauterine device is the most effective method of emergency contraception and can be considered by women who are not at high risk of sexually transmitted infections and who desire long-term contraception.
- There is no absolute contraindication to the use of oral emergency contraception, with the exception of pregnancy.
- Advanced provision of emergency contraception increases the rate and timeliness of use, and does not increase the rate of sexually transmitted infections or change the use of routine contraceptive methods.
- Encouraging appropriate patients to use LARCs may help lower the rate of unintended pregnancies in the United States, especially in high-risk women. There are few contraindications for the use of LARCs, even in nulliparous women and adolescents.
- Do not require a pelvic exam or other physical exam to prescribe oral contraceptive medications.
- Nulliparous women and adolescents can be offered an IUD, although the 20-mcg per 24 hours levonorgestrel-releasing IUD (Mirena) is not approved by the U.S. Food and Drug Administration for use in nulliparous women.
- Women who are at high risk of STIs but have no active signs or symptoms of genital tract STI should be tested for STIs at the time of IUD insertion. Insertion of the IUD may occur on the same day as STI testing, without waiting for test results. If results are subsequently found to be positive, treatment can be administered at that time and the IUD left in place.
- For women with a known STI that causes cervical infection, it is recommended that IUD insertion be delayed for at least three months after resolution of the infection.
- Prophylactic antibiotics should not routinely be administered before IUD insertion. Antibiotic prophylaxis does not have a major effect on reducing the risk of pelvic infection, and does not alter the need for IUD removal in the months after insertion.
- Misoprostol (Cytotec) should not be administered before IUD insertion. Although an earlier study showed easier insertion with misoprostol, subsequent studies showed no benefit and increased side effects.
- If a woman with an IUD becomes pregnant, the IUD should be removed.

These recommendations are provided only as assistance for physicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's family physician. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations. These recommendations are only one element in the complex process of improving the health of America. To be effective, the recommendations must be implemented. As such, physicians require continuing medical education to assist them with making decisions about specific clinical considerations.

Resources: Evidence-Based Practice Recommendations/Guidelines/Performance Measures

- Provision of Contraception: Key Recommendations from the CDC[9]
- Preventing Unintended Adolescent Pregnancy[4]
- Intrauterine Devices: An Update[12]
- Guidelines for the use of long-acting reversible contraceptives[15,16]
- FamilyDoctor.org. Birth Control (patient education)[17]

References

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2. Berlan ED, Pritt NM, Norris AH. Pediatricians' attitudes and beliefs about long-acting reversible contraceptives influence counseling. *Journal of pediatric and adolescent gynecology.* 2017;30(1):47-52.
3. Lopez LM, Grey TW, Tolley EE, Chen M. Brief educational strategies for improving contraception use in young people. *Cochrane Database Syst Rev.* 2016;3:Cd012025.
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5. American Academy of Family Physicians (AAFP). Adolescent Health Care, Sexuality and Contraception. *AAFP Policies* 2012;
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8. Berlin JA, Colditz GA. A meta-analysis of physical activity in the prevention of coronary heart disease. *American journal of epidemiology.* 1990;132.
9. Klein DA, Arnold JJ, Reese ES. Provision of Contraception: Key Recommendations from the CDC. *American family physician.* 2015;91(9):625-633.
10. Rubin SE, Campos G, Markens S. Primary care physicians' concerns may affect adolescents' access to intrauterine contraception. *Journal of primary care & community health.* 2013;4(3):216-219.
11. Rubin SE, Davis K, McKee MD. New york city physicians' views of providing long-acting reversible contraception to adolescents. *Annals of family medicine.* 2013;11(2):130-136.
12. Hardeman J, Weiss BD. Intrauterine devices: an update. *American family physician.* 2014;89(6):445-450.
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14. Bosworth MC, Olusola PL, Low SB. An update on emergency contraception. *American family physician.* 2014;89(7):545-550.
15. Randel A. Guidelines for the use of long-acting reversible contraceptives. *American family physician.* 2012;85(4):403-404.
16. Practice Bulletin No. 121: Long-Acting Reversible Contraception: Implants and Intrauterine Devices. *Obstetrics & Gynecology.* 2011;118(1):184-196.
17. FamilyDoctor.org. Birth Control. 1999;

