Body System: Women's Health		
Session Topic: Insertions and Removals of IUDs and Contraceptive Implant		
Educational Format	**Faculty Expertise Required**	
Clinical Procedural Workshop (CPW)	Expertise in the field of study. Experience teaching in the field of study is desired. Preferred experience teaching hands-on procedural workshops. The majority of the education must emphasize hands-on learning, with feedback from faculty.	
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 patients between the ages of 15-44 request birth control counseling and guidance on family planning. • Knowledge and performance gap in providing adequate management of contraception methods and patient counseling for women with chronic medical conditions. • 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	1. Become comfortable handling the instruments and devices associated with IUD and implant insertions and removals. 2. Develop strategies for implementation of practice changes needed in order to offer LARC in their office settings. 3. Counsel women about LARC in a non-biased, non-judgmental format, providing evidence-based information in a way that builds trust through shared decision making regarding contraceptive choices.	Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement newly acquired skills to utilize LARC methods.

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		

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 learners with recommendations and strategies for history taking and counseling patients on all types of LARCs as well as the absolute and relative contraindications.
- Provide recommendations to help learners utilize an EHR template for consent, procedure note and patient information for the LARC
- Provide learners an opportunity to demonstrate, and receive feedback performing the techniques for insertion and removal of the IUDs
- Provide recommendations for counseling patients on the risks, benefits and contraindications of available types of LARCs.
- Provide evidence-based recommendations for the provision of immediate postpartum LARC.
- Provide strategies to mitigate side effects of LARCs, such as breakthrough bleeding.

- Provide approaches to challenging LARC device insertion and removal (e.g., stenotic cervices, nulliparous women, non-palpable implants, complex anatomical situations, and missing IUD strings)
- Provide strategies for IUD malpositioning, expulsion, and perforation.
- Provide strategies for developing action plans for the diagnosis and treatment of infections and pregnancy with an IUD in place.
- Explain the appropriate use of CPT-4 and ICD-10-CM for LARC-related services; including the appropriate code selection and the documentation requirements for reporting Preventive Medicine services according to CPT guidelines.

Needs Assessment

Nearly half of pregnancies in the United States are unintended.[1,2] Physicians are frequently asked to provide contraceptive devices or prescribe birth control pills for a large percentage of their female patients. Research indicates that contraception is nearly universal, although the methods vary significantly among women of different education and income levels and racial and ethnic groups. The CDC reports that 99% of women aged 15-44 who have ever had sexual intercourse have used at least one method of contraception, and about 62% of women aged 15-44 were *currently* using a method of contraception, including:[3]

- Female sterilization (17%)
- Birth control pill (17%)
- Male condom (10%)
- Male sterilization (6%)
- **Intrauterine device (IUD) (3.4%)**
- Partner withdrawal (3.2%)
- Three-month injectable shots, such as medroxyprogesterone acetate (2%)
- **Implants, one-month injectable and the contraceptive patch (0.7%)**
- Periodic abstinence through natural family planning (0.1%)

Family planning and contraception services were ordered or provided during more than 11.5 million office visits in 2010.[4] The CDC's 2010 survey of contraception use in the United States reports that nearly half of all pregnancies are considered unintended, particularly among black and Hispanic women. Additionally, women with lower education and lower income levels were less likely to have used a method of contraception in their last intercourse. Many cited their non-use or inconsistent use of contraceptives was due to the belief that they could not get pregnant or the fact that they disliked the side effects of certain contraceptive methods (particularly the pill, patch, three-month injectable shots and male condom).

Data from the 2012 American Academy of Family Physicians (AAFP) CME Needs Assessment Survey indicated that family physicians feel confident in their knowledge and skill to manage contraception; however, CME outcomes data from the 2011-2016 AAFP FMX (formerly Assembly) sessions on *Contraception* suggests that family physicians have 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.[5-9] Physician comments from these sessions consistently asked for education regarding new varieties and formulations of oral contraception, updates on other forms of contraception, and handling special situations. Additionally, data from a recent AAFP CME Needs Assessment Survey for Common Medical Procedures indicates that family physicians have a moderate to high interest in receiving training for IUD insertion/removal and for contraceptive implant insertion.[10]

A review of the literature suggests the following practice gaps with regard to the appropriate and effective utilization of LARC:

- Despite ACOG guidelines, many practices do not offer same-day LARC insertion; thereby, creating an extra burden of multiple visits.[11-13]
- LARC methods, despite evidence-based recommendations and proven effectiveness, account for only 2% of contraceptive use in the U.S.[14]
- Time constraints often limit the physician's ability to offer detailed contraception counseling to patients.[15]
- Health care providers, especially health educators, often lack sufficient education and training regarding LARC methods.[13,16]
- Cost is a significant barrier to LARC utilization, particularly for privately insured women who are required to pay some or all of the cost of LARC methods.[13,17]

Research indicates that of the 61 million women between the ages of 15-44 who had received "at least one family planning service from a medical care provider in the past 12 months," nearly 42% had been provided at least one family planning service, such as a recommended birth control option, information about sterilization or emergency contraception; however, only 18.6% had received birth control counseling. This indicates a significant need for all health care providers who offer family planning to counsel their patients on appropriate birth control methods, or, conversely, what resources are available in the event of pregnancy.[18]

CDC research indicates that contraceptive methods chosen by women tend to differ by race/ethnicity, level of education and income. For example:

- IUD use is higher among women in the top two education and income groups.
- Non-Hispanic white women are more likely to rely on the pill or male sterilization when compared with Hispanic and black women.
    - Conversely, black women are more likely to use female sterilization and also more likely to have higher rates of unintended pregnancy.
- Hispanic women were the least likely to use more than one method of contraception (e.g., male condom and the pill) when compared to white and black women.

Accordingly, family physicians should also be prepared to exercise cultural competency in treating patients who have different contraception needs. Patients of different ages, racial/ethnic groups and education and income groups may require counseling on specific methods and anticipated reproductive outcomes.

Family physicians should ensure that whatever method of birth control is discussed or prescribed (either in the form of the pill or a device), patients should fully understand the directions, side effects, correct use and any backup methods that should be employed if the product is not 100%

effective. Additionally, family physicians should initiate or continue conversations with women of reproductive age on contraception needs, use and expectations of different selections.

For women who have complicated child bearing, or have made the decision with their partner to not have any more children, the most common choice among women in the United States is female sterilization (tied with birth control pill at 17%).[3,19] The 2010 American Academy of Family Physicians (AAFP) Practice Profile Survey indicates that 3.9% of family physicians provide tubal ligation procedures in their practice.[20] While this procedure is not commonly performed by family physicians, because these methods are intended to be irreversible, all women should be appropriately counseled about the permanency of sterilization and the availability of highly effective, long-acting, reversible methods of contraception.[18] Younger women and women with unexpected life events, such as change in marital status or death of a child, are more likely to experience regret; therefore, physicians should be prepared to counsel patients before and after the procedure, even if the procedure is performed by another health care provider.

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:[1,21-27]

- 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.
- Clinicians should consider a tiered approach to contraceptive counseling, whereby the most effective and appropriate options are presented before less effective options.
- Requiring prerequisite preventive services, such as cervical cytology; breast examination; or evaluation for sexually transmitted infections, diabetes mellitus, dyslipidemia, liver disease, or thrombophilia, can introduce unnecessary barriers to contraceptive care.
- 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.
- Family planning services should be offered to adolescents with assurances of confidentiality, in the context of relevant law.

- Intrauterine devices and contraceptive implants are safe and effective for postmenarchal adolescents.
- Estrogen-containing contraceptives should be deferred until at least three or up to six weeks postpartum, partly because of the risk of venous thromboembolism.
- Contraceptive use for unintended pregnancy prevention should be considered until menopause, or at least until 50 to 55 years of age.
- 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.
- 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.
- Women should switch directly from one contraceptive pill to another to eliminate a gap in contraception.
- The return to fertility after removing an intrauterine device may be immediate; therefore, an overlap period of seven days is recommended with most contraceptive methods.
- The copper intrauterine device should be inserted within five days of discontinuing a previous contraceptive method.
- Do not require a pelvic exam or other physical exam to prescribe oral contraceptive medications.

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.

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