Body System: Reproductive-Female		
Session Topic: 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 patients between the ages of 15-44 request birth control counseling and guidance on family planning. • 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	1. Counsel patients regarding the safety and efficacy of new and current contraception methods that are most consistent with their lifestyle and beliefs. 2. Counsel patients with questions and concerns regarding emergency contraception, and determine if OTC or prescription or some other form of prescription emergency contraception if appropriate. 3. Apply evidence-based recommendations and guidelines to contraception management of women with chronic medical conditions. 4. Integrate evidence-based recommendations and guidelines to safely and effectively manage the transition of switching contraceptives.	Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement presented practice recommendations.

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 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 recommendations for counseling patients regarding the safety and efficacy of new and current contraception methods that are most consistent with their lifestyle and beliefs. Including an overview of the safety and efficacy of new varieties and formulations, compared to currently available methods.
- Provide strategies and resources for counseling patients with questions and concerns regarding emergency contraception, and determine if OTC or prescription or some other form of prescription emergency contraception if appropriate.
- Provide recommendations regarding evidence-based recommendations and guidelines to contraception management of women with chronic medical conditions.
- Provide recommendations and resources for integrating evidence-based recommendations and guidelines to safely and effectively manage the transition of switching contraceptives.
- Provide recommendations regarding guidelines for Medicare reimbursement.
- Provide recommendations to maximize office efficiency and guideline adherence to contraception management.
- Provide an overview of newly available treatments, including efficacy, safety, contraindications, and cost/benefit relative to existing treatments.
- Provide instructions regarding the incorporation and use of the PCMH/ACO/Primary Care Core Measure Set into practice.

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 injectables 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). Recent studies indicate significant racial/ethnic differences exist in contraceptive use among women who have completed childbearing, which do not appear to be explained by differential socioeconomic status, reproductive characteristics, or utilization of healthcare.[5]

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 2011-2014 AAFP 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.[6-9] 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.

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. In fact, several studies indicate that contraception counseling is often provider-dominated, with minimal engagement between women and their providers to deliver personalized counseling tailored to the individual women's needs and preferences.[10] This indicates a significant need for all health care providers who offer family planning to use a shared decision-making approach to counsel their patients on appropriate birth control methods, or, conversely, what resources are available in the event of pregnancy.[11]

Additionally, it is worth noting that the use of emergency contraception has risen substantially in recent years; more than 10% of women had used it in 2006-2008 (compared to 4% in 2002).[3] Research suggests that widespread use of emergency contraception could reduce unintended pregnancies in the U.S. by one-half, which translates to 3 million fewer unintended pregnancies.[12] The FDA approved Plan B One-Step emergency contraception for use without a prescription for all women of child-bearing age; however, this product will not stop a pregnancy when a woman is already pregnant and there is no medical evidence that the product will harm a developing fetus, and some women have reported nausea, vomiting, stomach pain, headache, dizziness and breast tenderness.[13] Family physicians should be prepared to counsel patients with questions and concerns regarding emergency contraception, and determine if OTC or prescription or some other form of prescription emergency contraception if for appropriate.

Family physicians should receive continuing education on current FDA approved contraception management drugs and devices.

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, 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.

An unintended pregnancy can have serious health consequences in women with chronic medical conditions, and women with comorbidities frequently do not receive adequate counseling on contraceptive methods.[14,15] Family physicians should receive continuing education to help them apply evidence-based recommendations and guidelines for prescribing contraceptives to women with comorbidities.[1] Physicians may also want to consider counseling couples about natural family planning methods, which is typically 76 percent effective, and can be as effective as 95 percent if used perfectly.[16] The natural family planning method may be a viable alternative to those patients who are interested in avoiding complications associated with other birth control options.

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%).[3,17] 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.[18] 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.[11] 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.

Physician-learners from previous Scientific Assembly sessions on the topic of contraception management have indicated a need to better understand how to prevent gaps with switching contraceptives. As some contraception transitions require an overlap between the old method and the new method, family physicians should follow evidence-based recommendations to safely and effectively manage this transition.

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:[1,12,16,19-25]

- 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.
- 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 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.
- Ulipristal (Ella) is marginally more effective than levonorgestrel at preventing unintended pregnancy within 72 hours postcoitus. Levonorgestrel appears to be equally effective in the single- and split-dose regimens.
- 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.
- 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.
- 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.
- Lactational amenorrhea is 92 to 100 percent effective in preventing pregnancy during the first six months postpartum in women who exclusively breastfeed their infants, provided that menstruation does not resume.
- With perfect use, modern natural family planning methods can be as effective in preventing pregnancy as hormonal contraceptives.
- The Creighton Model for cervical mucus monitoring and the symptothermal method are the most effective natural family planning methods currently available.
- The no-scalpel technique is preferred for gaining access to the vas deferens during vasectomy.
- Fascial interposition should be incorporated with the vasal occlusion technique during vasectomy.
- One postvasectomy semen analysis demonstrating azoospermia performed after three months and 20 ejaculations is sufficient to establish sterility.

Additionally, physicians should be familiar with the following AAFP Polices regarding contraception:

- Adolescent Health Care, Sexuality and Contraception[26]
- Adolescent Health Care, Confidentiality[27]
- Reversible Contraception Methods[28]
- Contraceptive Advice[29]
- Over-the-Counter Oral Contraceptives[30]

Best Practices in Surgery – Recommendations From the Choosing Wisely® Campaign:[24]

- Avoid routine preoperative testing for low-risk surgeries without a clinical indication.

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.

The American Academy of Family Physicians Academy has participated in the Core Measures Collaborative (the Collaborative) convened by America's Health Insurance Plans (AHIP) since August 2014. The Collaborative is a multi-stakeholder effort working to define core measure sets of various specialties promoting alignment and harmonization of measure use and collection across both public and private payers.

Participants in the Collaborative included Centers for Medicare and Medicaid Services (CMS), the National Quality Forum (NQF), private payers, provider organizations, employers, and patient and consumer groups. This effort exists to decrease physician burden by reducing variability in measure selection, specifications and implementation– making quality measurement more useful and meaningful for consumers, employers, as well as public and private clinicians.

With significant AAFP input, a PCMH/ACO/Primary Care Core Measure Set has been developed for primary care. The goal of this set is to decrease burden and allow for more congruence between payer reporting programs.[31]

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

- Provision of Contraception: Key Recommendations from the CDC[1]
- Guidelines for the use of long-acting reversible contraceptives[19,20]
- An update on emergency contraception[12]
- Contraception choices in women with underlying medical conditions[14]
- Natural family planning[16]
- Common questions about vasectomy[24]
- Intrauterine Devices: An Update[25]
- Counseling issues in tubal sterilization[17]
- Preventing gaps when switching contraceptives[21]
- FDA approves Plan B One-Step emergency contraceptive[13]
- Improving Patient Care: Cultural Competence[32]
- Achieving a more minority-friendly practice[33]
- Engaging Patients in Collaborative Care Plans[34]
- Documenting and Coding Preventive Visits: A Physician's Perspective[35]
- FamilyDoctor.org. Birth Control (patient education)[36]

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