



Body System: Women's Health		
Session Topic: Female Cancer Prevention, Screening, and Diagnosis		
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. <u>Please describe your interest and plan for teaching a PBL on your proposal form.</u>
Professional Practice Gap	Learning Objective(s) that will close the gap and meet the need	Outcome Being Measured
<ul style="list-style-type: none"> Patients are at risk for undue harm with unnecessary screening because over-identification of risk, and excessive, costly biopsies for breast cancer. There is poor adherence to breast cancer screening and prevention clinical guidelines. There are barriers to adopting appropriate risk screening and prevention include inaccurate risk perceptions, inadequate time for counseling, insufficient knowledge about risk-reducing strategies, and a number of potential ethical and social issues. Knowledge and practice gaps with regard to adequate utilization of breast cancer risk assessment tools; adherence to screening and 	<ol style="list-style-type: none"> 1. Explain the USPSTF screening recommendations or lack of to patients regarding breast, cervical, uterine and ovarian cancers and become familiar with the AHRQ app. 2. Recommend preventive measures to patients regarding breast, cervical, uterine and ovarian cancers. 3. Become familiar with the ASCCP guidelines and app for pap smear abnormalities. 4. Describe worrisome symptoms that may indicate testing is warranted for breast, cervical, uterine and ovarian cancers. 5. Understand risk factors for breast, cervical, uterine and ovarian cancers and describe scenarios when the screening recommendations vary due to high risk conditions. 	Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement presented practice recommendations.



<p>risk assessment guidelines; appropriate use of diagnostic testing; counseling patients regarding screening, treatment, and survivorship; genetic counseling and referral; and interpretation of pathology reports</p> <ul style="list-style-type: none"> • Knowledge and performance gaps in using available patient education resources to counsel patients about HPV vaccine safety and efficacy. • Physician frequently are non-adherent to guidelines for the follow-up of abnormal Pap and HPV tests. • Knowledge gaps with regard to the screening, diagnosis and management of endometrial cancer. • Physicians have knowledge gaps with regard to appropriate screening for ovarian cancer, and providing optimal care during the treatment and management of ovarian cancer. • Primary care physicians are frequently non-adherent to genetic counseling and testing clinical guideline recommendations. • Both physicians and patients are often unaware of clinical trials for ovarian cancer. 		
ACGME Core Competencies Addressed (select all that apply)		
X		Medical Knowledge
		Patient Care



X	Interpersonal and Communication Skills		Practice-Based Learning and Improvement
	Professionalism	X	Systems-Based Practice
Faculty Instructional Goals			
<p>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.</p> <ul style="list-style-type: none"> • 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 <u>References</u> section below are a good place to start <ul style="list-style-type: none"> ○ Visit http://www.aafp.org/journals for additional resources ○ Visit http://familydoctor.org for patient education and resources • Provide an overview of the USPSTF screening recommendations or lack of to patients regarding breast, cervical, uterine and ovarian cancers and become familiar with the AHRQ app. • Provide strategies and resources for recommending preventive measures to patients regarding breast, cervical, uterine and ovarian cancers. • Provide an overview of ASCCP guidelines and app for pap smear abnormalities, & provide strategies for integrating these guidelines into practice. • Provide strategies for identifying worrisome symptoms that may indicate testing is warranted for breast, cervical, uterine and ovarian cancers. • Provide an overview of risk factors for breast, cervical, uterine and ovarian cancers and describe scenarios when the screening recommendations vary due to high risk conditions. 			

Needs Assessment

Breast Cancer

Not counting skin cancer, breast cancer is the most common cancer and the second leading cause of cancer death in North American women.^{1,2} In 2015, an estimated 231,840 new cases of invasive breast cancer are expected to be diagnosed in women in the U.S., along with 60,290 new cases of non-invasive (in situ) breast cancer. About 2,350 new cases of invasive breast cancer are expected to be diagnosed in men in 2015. A man’s lifetime risk of breast cancer is about 1 in 1,000.³ At this time there are more than 2.8 million breast cancer survivors in the United States, including both women who are still being treated and those who have completed treatment.⁴



According to recent American Academy of Family Physicians (AAFP) CME Needs Assessment survey data, family physicians have a statistically significant gap in knowledge with regard to the management of breast cancer.⁵ More specifically, CME outcomes data from 2011 AAFP Assembly: *Breast Cancer and Breast Mass: Breast Cancer and Survivorship* sessions suggest that physicians have knowledge and practice gaps with regard to adequate utilization of breast cancer risk assessment tools; adherence to screening and risk assessment guidelines; appropriate use of diagnostic testing; counseling patients regarding screening, treatment, and survivorship; genetic counseling and referral; and interpretation of pathology reports.⁶ CME outcomes data from the 2013 AAFP Assembly: *Care of Cancer Survivors* sessions indicate that family physicians require additional continuing medical education to better understand and implement cancer survivorship guidelines, surveillance strategies, access to community and web-based resources, and strategies to improve communication and coordinate care with oncology, surgical, and other health care providers.⁷ AAFP Women's Health: *Breast Cancer and Breast Mass* self-study package CME outcomes data suggest that physicians have knowledge gaps with regard to determining the appropriate initial diagnostic approach; understanding the implications of BRCA for testing; and breast cancer prevention or prophylaxis.⁸

Recent studies report that physician adherence to genetic counseling and testing recommendations are lacking, resulting in low rates of referral. Physicians are inconsistent with their management recommendations for patients who are BRCA1 mutation carriers, and are not consistent with current clinical guidelines.⁹⁻¹¹ Based on this evidence, the U.S. Preventive Services Task Force (USPSTF) and other professional organizations recommend that clinicians discuss chemoprevention with women at high risk.^{12,13} Additionally, studies indicate that patients may be at risk for undue harm from unnecessary screening because over-identification of risk, and excessive, costly biopsies.^{14,15} Some barriers to adopting appropriate risk screening and prevention include inaccurate risk perceptions, inadequate time for counseling, insufficient knowledge about risk-reducing strategies, and a number of potential ethical and social issues.^{10,16,17} Physician-learners need strategies to help them incorporate evidence-based breast cancer risk assessment recommendations as part of routine primary care.¹⁸

Physicians can improve patient satisfaction with the referral process by using readily available strategies and tools such as, improving internal office communication, engaging patients in scheduling, facilitating the appointment, tracking referral results, analyzing data for improvement opportunities, and gathering patient feedback.^{19,20}

Physicians are also challenged to keep up with new breast cancer companion diagnostic devices and treatment option; physicians therefore, should receive ongoing education about new updates from the FDA and how they are applicable to their practice.^{21,22}

Physicians are inconsistent with breast cancer guideline adherence; physicians should receive continuing medical education that provides strategies for integrating evidence-based guidelines into practice. Physicians may improve their care of patients with breast cancer 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:

- AAFP Breast Cancer Clinical Preventive Service Recommendations¹³



- Breast Cancer Screening Update¹
- Treatment of Breast Cancer²³
- Medications for risk reduction of primary breast cancer in women: recommendation statement²⁴
- American College of Obstetricians and Gynecologists Updates Breast Cancer Screening Guidelines²⁵
- Common Breast Problems²⁶
- Gynecomastia²⁷

Cervical Cancer

In 2010 11,818 women in the United States were diagnosed with cervical cancer, and 3,939 women died from cervical cancer; with estimates of 12,360 new cases diagnosed in 2014, and approximately 4,020 deaths.^{28,29}

Data from a recent American Academy of Family Physicians (AAFP) CME Needs Assessment survey indicate that family physicians report having adequate medical knowledge to perform cervical cancer screenings; however, there are indications that physicians do have knowledge gaps with regard to sexual health counseling, particularly with regard to cultural competencies in counseling parents about HPV vaccinations for the prevention of cervical cancer.⁵ More specifically, CME outcomes data from 2012-2016 AAFP FMX (formerly Assembly): *Human Papillomavirus, Pap Smears, and Cervical Cancer Screening* sessions suggest that physicians have knowledge and practice gaps with regard to non-adherence to cervical cancer screening clinical guideline recommendations; appropriate follow-up for abnormal Pap smear; being up to date on currently available vaccine options; having standardized vaccination procedure in place; and counseling adolescent patients and parents about HPV vaccination safety and efficacy, especially in terms of cancer prevention.^{7,30-32}

While HPV vaccination plays a significant role in the prevention of cervical cancer, data from a 2013 CDC Morbidity and Mortality Weekly Report, finds that coverage with at least one dose of human papillomavirus, or HPV, vaccine in 2012 was 53.8% and increased by 0.8% percent compared with 2011.^{33,34} Only 32 percent of adolescent girls had completed the entire three-dose HPV series. The CDC is urging physicians to make a strong recommendation for the HPV vaccine, which protects against precancerous cervical lesions and genital warts.³⁵ Family physicians should be aware of recent vaccines approved by the FDA that can prevent against the most common strains of the virus. For example, in 2014 the FDA approved Gardasil 9 for the prevention of certain diseases caused by nine types of Human Papillomavirus (HPV).³⁶

There are numerous barriers to achieving optimal vaccination rates, including low patient health literacy and understanding of vaccine safety and efficacy; organizational barriers such as cost, insurance coverage; and operational barriers such as not stocking all recommended vaccinations and lack of standing orders.³⁷⁻⁴² The 2012 AAFP Immunization Survey indicates that the most commonly-cited patient barriers to immunization were safety concerns (58%), personal or religious beliefs (53%) and cost (51%); the most commonly-cited practice-level barriers to immunization were cost (51%), patient acceptance (33%), and supply of vaccine (30%); sixty-five percent of respondents indicated that at least one parent refused vaccinations for their child;



fifty-seven percent of respondents indicated participation in the Vaccines for Children program, and among those who did not indicate participation, respondents indicated that it was too burdensome (36%), difficulties associated with keeping vaccines separated (34%), difficulty of record-keeping (32%), and they don't care for children (28%).⁴³

Family physicians should remain up to date on current AAFP immunization schedules, and receive continuing education aimed at helping physicians overcome common barriers to immunization management, including patient education on vaccination safety and efficacy.⁴⁴⁻⁴⁷

A review of the literature validates inadequate adherence to cervical cancer screening clinical practice guidelines.⁴⁸⁻⁵² Physician factors for guideline adherence appear to be related to congruence of guidelines between medical associations, physician perception of the recommending agency, belief in the effectiveness of new screening technologies, proportion of Medicaid patients, number of years since medical school graduation, and patient acceptance of new guideline recommendations.^{48,53,54} Physician continuing medical education with recommendations by experts, improved physician-patient communication, patient education about Pap testing, implementation of systems strategies (e.g. electronic medical record prompts, clinical information systems, decision support strategies), and use of invitation letters for testing are shown to increase adherence to cervical cancer screening guidelines.⁵⁵⁻⁶¹

A review of the literature reveals that even for the most common abnormal Pap and HPV test results, physicians often report recommendations that are incongruent with clinical practice guidelines, including adherence to guidelines for newer HPV DNA tests.⁶² In a recent decision (July 2015), the Centers for Medicare & Medicaid Services (CMS) has determined that the evidence is sufficient to add Human Papillomavirus (HPV) testing once every five years as an additional preventive service benefit under the Medicare program for asymptomatic beneficiaries aged 30 to 65 years in conjunction with the Pap smear test. CMS will cover screening for cervical cancer with the appropriate U.S. Food and Drug Administration (FDA) approved/cleared laboratory tests, used consistent with FDA approved labeling and in compliance with the Clinical Laboratory Improvement Act (CLIA) regulations.⁶³

Physicians may improve the prevention of HPV, and adherence to cervical cancer screening guidelines 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:⁶⁴⁻⁶⁷

- Your recommendation is the number one reason why someone will get the HPV vaccine. Research data show that patients who receive a recommendation from their physician are four to five times more likely to receive the HPV vaccine.
- Recommends screening for cervical cancer in women age 21 to 65 years with cytology (Pap smear) every 3 years or, for women age 30 to 65 years who want to lengthen the screening interval, screening with a combination of cytology and human papillomavirus (HPV) testing every 5 years. (Grade A)
- Recommends against screening for cervical cancer in women younger than age 21 years. (Grade D)
- Recommends against screening for cervical cancer in women older than age 65 years who have had adequate prior screening and are not otherwise at high risk for cervical



cancer. See the Clinical Considerations for discussion of adequacy of prior screening and risk factors. (Grade D)

- Recommends against screening for cervical cancer in women who have had a hysterectomy with removal of the cervix and who do not have a history of a high-grade precancerous lesion (cervical intraepithelial neoplasia [CIN] grade 2 or 3) or cervical cancer. (Grade D)
- Recommends against screening for cervical cancer with HPV testing, alone or in combination with cytology, in women younger than age 30 years. Grade D)
- Two or more colposcopic-directed cervical biopsies should be performed to increase the sensitivity of colposcopy for identifying high-grade CIN lesions.
- Colposcopic-directed biopsies of acetowhite epithelium should be performed even when the colposcopic impression is squamous metaplasia or low-grade disease.
- Excisional and ablative methods have similar outcomes for eradication of CIN.
- Excisional techniques for treating CIN increase the risk of preterm labor and low birth weight, especially with greater depth of excision.

Additionally, physicians should consider the current American Congress of Obstetricians and Gynecologists (ACOG) cervical cancer screening clinical guidelines, ACOG guidelines for the management of abnormal cervical cancer screening test results and cervical cancer precursors, National Comprehensive Cancer Network (NCCN) Cervical Cancer guidelines, and the updated recommendations from the American Cancer Society (ACS), the American Society for Colposcopy and Cervical Pathology (ASCCP), and the American Society for Clinical Pathology (ASCP) for the early detection of cervical cancer.⁶⁸⁻⁷¹ Physicians need continuing medical education that provides guidance for the practical implementation of guideline recommendations.

Endometrial Cancer

Endometrial (uterine) cancer is the fourth most common cancer in women in the United States and the most commonly diagnosed gynecologic cancer; in 2010 44,717 women in the U.S. were diagnosed with endometrial cancer, and 8,402 women in the U.S. died from endometrial cancer.⁷² The American Cancer Society estimates there will be approximately 54,870 new cases of cancer of the body of the uterus in 2014, with about 10,170 deaths from endometrial cancers.⁷³ As endometrial cancer is the leading cause of gynecologic cancer in the United States, it should be the primary focus of this education.

Data from a recent American Academy of Family Physicians (AAFP) CME Needs Assessment Survey suggests that family physicians have gaps in the medical knowledge necessary to provide optimal patient care for endometrial cancer, as well as providing care for cancer survivors generally; as well as the evaluation of abnormal uterine bleeding.⁵ More specifically, CME outcomes data from 2015 and 2016 AAFP FMX (formerly Assembly) *Uterine Cancer* sessions, as well as from 2015 FP Essentials: *Genital Cancers in Women-Uterine Cancer* monograph, suggest that physicians have knowledge and practice gaps with regard to following evidence-based screening guidelines; effective strategies to offer and encourage HPV vaccination; performing biopsies; coordination of referral; and diagnostic evaluation (e.g. transvaginal US; EMB) of patients with post-menopausal bleeding.^{30,74,75}



With more than eighty percent (81.5%) surviving endometrial cancer for five years, there are an estimated 610,804 survivors of this cancer; thereby making it important for physicians to increase their knowledge and skills to provide optimal cancer survivorship care.⁷⁶ Data from a recent AAFP CME Needs Assessment Survey indicates that family physicians have gaps in the medical knowledge and skill necessary to provide optimal cancer survivorship care.⁵ Therefore, physicians can improve their care of vulvar cancer survivors by integrating relevant evidence-based practices from the American Society of Clinical Oncology Survivorship Guidelines.⁷⁷

Physicians should be familiar with screening guidelines, especially for those with risk assessment for uterine cancer, such as long-term use of high-dose menopausal estrogens, high cumulative doses of tamoxifen, estrogen-producing tumor, obesity, nulliparity, diabetes, hypertension, thyroid or gallbladder disease, older age, history of infertility, late age natural menopause, early age at menarche, menstrual irregularities, white race, long-term use of high doses of combination oral contraceptives, cigarette smoking, family history of endometrial cancer, early-onset colorectal cancer without a MMR gene mutation, postmenopausal bleeding, and polycystic ovary syndrome.⁷⁸⁻⁸² Obesity is a known risk factor for endometrial carcinoma in white women; and a recent study has also found a strong positive association between obesity and endometrial cancer in black women.⁸³

Family physicians should be prepared to diagnose endometrial cancer by physical examination, appropriate laboratory evaluation, and diagnostic studies.⁸⁴ Staging of endometrial cancer is surgically based, and for primary care physicians the preoperative evaluation should also focus on optimizing medical comorbidities that could complicate the course of treatment.⁸⁴ Physicians should be familiar with the two systems used for staging endometrial cancer, the FIGO (International Federation of Gynecology and Obstetrics) system and the American Joint Committee on Cancer TNM staging system. Physicians should also be familiar with recent studies indicating that tubal ligation is associated with lower stage and mortality among women with aggressive endometrial carcinomas, suggesting transtubal spread is clinically important.⁸⁵

Physicians may improve their care of patients with endometrial cancer 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:^{64,84,86-89}

- Women older than 65 years should be informed of the risks and symptoms of endometrial cancer and advised to seek evaluation if symptoms occur.
- Women with abnormal uterine bleeding should be evaluated for endometrial cancer if they are older than 45 years or if they have a history of unopposed estrogen exposure.
- In postmenopausal women, the endometrial thickness on transvaginal ultrasonography should be less than 4 to 5 mm. With thickness above this level, biopsy should be considered to rule out endometrial hyperplasia or cancer.
- The American Cancer Society recommends offering annual screening for endometrial cancer with endometrial biopsy beginning at 35 years of age for women who have or are at risk of developing hereditary nonpolyposis colorectal cancer.
- For postmenopausal women with benign endometrial cells on Pap smear, endometrial assessment is recommended regardless of symptoms.



- Women with atypical endometrial cells on Pap smear should be evaluated initially with endocervical and endometrial sampling.
- Women 45 years or older with recurrent anovulation, women younger than 35 years with risk factors for endometrial cancer, and women with excessive bleeding unresponsive to medical therapy should undergo endometrial biopsy.
- Endometrial biopsy can accurately detect carcinoma involving a large portion of the endometrium, but may fail to detect focal lesions and carcinoma involving 50% or less of the endometrial surface area.
- Transvaginal ultrasonography showing endometrial thickness of less than 4 mm essentially rules out endometrial carcinoma in a postmenopausal woman.
- A focal endometrial lesion found on saline infusion sonohysterography should be evaluated with hysteroscopy.
- Antiestrogen therapy (e.g., tamoxifen) reduces the risk of recurrent cancer in hormone receptor–positive breast disease, but it causes hot flashes and sexual dysfunction and is associated with an increased risk of endometrial cancer.

Best practices in oncology: recommendations from the Choosing Wisely® campaign:⁹⁰

- Do not perform Papanicolaou tests for surveillance of women with a history of endometrial cancer.

With regard to the care of patients with endometrial cancer, physicians should consider the following evidence-based recommendations:⁹¹

In general, the work up of endometrial cancer can be managed in the office, until more specialized investigations are needed; in which case, physicians should have standardized coordination of care protocols in place.⁹² Primary care providers are often overburdened by an aging population with multiple chronic conditions and may not be adequately prepared to care for these survivors due to perceived knowledge gaps about the individualized needs, risks, and surveillance plans for cancer survivors.⁹³⁻⁹⁶ Additionally, there is often a lack of inter-professional communication and clarity about responsibilities in the coordination of care between oncology professionals and primary care providers.^{94,95,97} In fact, patients are often unaware that a transition back to their primary care provider, from their oncology provider, is an option. Physicians can improve patient satisfaction with the referral process by using readily available strategies and tools such as, improving internal office communication, engaging patients in scheduling, facilitating the appointment, tracking referral results, analyzing data for improvement opportunities, and gathering patient feedback.^{19,20,98}

Ovarian Cancer

The Centers for Disease Control and Prevention (CDC) indicates that 19,959 women in the United States were diagnosed with ovarian cancer in 2010; and 14,572 women in the U.S. died from ovarian cancer.⁹⁹ More than 93% of women diagnosed in early stages survive five years; however, fewer than 15% of cases are diagnosed early.¹⁰⁰

Data from a recent American Academy of Family Physicians (AAFP) CME Needs Assessment Survey suggests that family physicians have gaps in the medical knowledge necessary to provide optimal patient care for ovarian cancer, as well as providing care for cancer survivors generally.⁵



More specifically, CME outcomes data from 2015 AAFP FMX (formerly Assembly) *Ovarian Cancer* sessions, suggest that physicians have knowledge and practice gaps regarding the use of appropriate screening tests for ovarian cancer; awareness of available online tools for patient counseling; and ovarian cancer risk evaluation.⁷⁵ CME outcomes data from the 2013 AAFP Assembly: *Care of Cancer Survivors* sessions indicate that family physicians require additional continuing medical education to better understand and implement cancer survivorship guidelines, surveillance strategies, access to community and web-based resources, and strategies to improve communication and coordinate care with oncology, surgical, and other health care providers.⁷

A review of the literature identifies several gaps in providing optimal care for patients with ovarian cancer:

- Recent studies report that physician adherence to genetic counseling and testing recommendations are lacking, resulting in low rates of referral.^{9,10}
- Physicians are inconsistent with their management recommendations for patients who are BRCA1 mutation carriers, and are not consistent with current clinical guidelines.¹¹
- Women in the Medicare population with advanced ovarian cancer frequently receive sub-optimal care, in that many do not receive both combination therapy with surgery and at least 6 cycles of chemotherapy.¹⁰¹
- Both physicians and patients are often unaware of clinical trials for ovarian cancer¹⁰²
- Geographic barriers to standard ovarian cancer treatment disproportionately affect racial minorities and women of low-SES¹⁰³

Physicians can significantly improve their management of ovarian cancer by integrating evidence-based clinical recommendations into practice.

Although the mortality rate associated with ovarian cancer is high, both the U.S. Preventive Services Task Force (USPSTF) and the AAFP *recommend against* screening for ovarian cancer in women.^{104,105} Both organizations also *recommends against* routine referral for genetic counseling or routine breast cancer susceptibility gene (BRCA) testing for women whose family history is not associated with increased risk for deleterious mutations in breast cancer susceptibility gene 1 (BRCA1) or breast cancer susceptibility gene 2 (BRCA2). However, both organizations do *recommend* that women whose family history is associated with an increased risk for deleterious mutations in BRCA1 or BRCA2 genes be referred for genetic counseling and evaluation for BRCA testing. Additionally, the Society of Gynecologic Oncology (SGO) makes a Choosing Wisely[®] to *not screen* low-risk women with cancer antigen (CA) 125 or ultrasound for ovarian cancer.¹⁰⁶ However, for patients with hereditary nonpolyposis colorectal cancer syndrome or hereditary breast and ovarian cancer syndrome who choose not to undergo prophylactic bilateral salpingo-oophorectomy, the National Comprehensive Cancer Network recommends transvaginal ultrasonography and CA 125 measurement every six months during days 1 through 10 of the menstrual cycle. This should begin at 35 years of age, or five to 10 years earlier than the earliest age of diagnosis of ovarian cancer in the family.¹⁰⁷ Prophylactic bilateral salpingo-oophorectomy should be considered in women with a mutation in the BRCA1 or BRCA2 gene, or hereditary nonpolyposis colorectal cancer syndrome (i.e., Lynch II syndrome).¹⁰⁷



Physicians may improve prevention care, screening and diagnosis of ovarian cancer 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:¹⁰⁸

- Women should undergo diagnostic imaging with transvaginal ultrasonography if there is strong clinical suspicion for ovarian cancer based on clinical presentation or a pelvic mass.
- The USPSTF and the AAFP recommend against routine screening for ovarian cancer in asymptomatic women.
- The USPSTF and the AAFP recommend that women with a family history associated with an increased risk of harmful BRCA mutations* be referred for genetic counseling.
- The American College of Physicians recommends against routine screening pelvic examinations in asymptomatic women.

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.

If the shared decision making process leads to screening, and ultimately testing, physicians need to be knowledgeable of appropriate laboratory testing and imaging.^{107,109-115} The American College of Obstetrics and Gynecologists (ACOG) recommends referral to a gynecologic oncologist for patients whose test results meet certain thresholds.¹⁰⁷ Physicians can provide greater patient satisfaction and high-quality care by implementing evidence-based referral strategies and tools.^{19,116}

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

- Treatment of breast cancer²³
- Medications for risk reduction of primary breast cancer in women: recommendation statement²⁴
- ACOG Practice Bulletin No. 122: Breast Cancer Screening²⁵
- Familydoctor.org – Breast Cancer (patient education)¹¹⁷
- AAFP Human Papillomavirus Vaccine⁶⁵
- AAFP Cervical Cancer. Clinical Preventive Service Recommendation⁶⁷
- Interventions to increase cervical cancer screening rates⁵⁷
- Human papillomavirus: clinical manifestations and prevention⁶⁶
- ACOG Practice Bulletin Number 131: Screening for cervical cancer⁷⁰
- Gynecologic Procedures: Colposcopy, Treatment of Cervical Intraepithelial Neoplasia, and Endometrial Assessment⁶⁴
- ACS/ASCCP/ASCP guidelines for the early detection of cervical cancer⁶⁸



- Use of primary high-risk human papillomavirus testing for cervical cancer screening: Interim clinical guidance¹¹⁸
- ACOG Practice Bulletin No. 140: management of abnormal cervical cancer screening test results and cervical cancer precursors⁶⁹
- NCCN Guidelines: Cervical Cancer⁷¹
- Diagnosis and Management of Endometrial Cancer⁹⁰
- Endometrial Cancer⁸⁴
- Gynecologic Procedures: Colposcopy, Treatment of Cervical Intraepithelial Neoplasia, and Endometrial Assessment⁶⁴
- Abnormal Uterine Bleeding⁷⁹
- Endometrial cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up¹¹⁹
- ACOG Practice Bulletin number 149: management of endometrial cancer¹²⁰
- Surveillance of the Adult Cancer Survivor⁸⁶
- The role of adjuvant therapy in endometrial cancer¹²¹
- Epidemiology and investigations for suspected endometrial cancer¹²²
- Evaluation and management of abnormal uterine bleeding in premenopausal women⁸⁹
- Simple tools to increase patient satisfaction with the referral process¹⁹
- Recent Updates to NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®)¹²³
- Advancing survivorship care through the National Cancer Survivorship Resource Center: developing American Cancer Society guidelines for primary care providers¹²⁴
- Primary care of the patient with cancer⁹¹
- NCCN Patient and Caregiver Resources¹²⁵
- American Society of Clinical Oncology: Survivorship Guidelines⁷⁷
- Nutrition and physical activity guidelines for cancer survivors¹²⁶
- Models of care for cancer survivorship¹²⁷
- Cancer | After Cancer Treatment (patient education)¹²⁸
- Diagnosis and Management of Ovarian Cancer¹⁰⁸
- Ovarian Cancer: An Overview¹⁰⁷
- AAFP Clinical Preventive Service Recommendation: Ovarian Cancer¹⁰⁵
- NCCN Ovarian Cancer Guidelines¹⁰⁹
- ACR Appropriateness Criteria - ovarian cancer screening¹¹¹
- ACR Appropriateness Criteria - staging and follow-up of ovarian cancer¹¹⁶
- ACOG Hereditary breast and ovarian cancer syndrome¹¹⁰
- Familydoctor.org - Cancer | Overview (patient education)¹²⁹
- Familydoctor.org – Ovarian Cancer (patient education)¹³⁰

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