# Genetic Counseling and Testing Guidelines

# National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology

The NCCN is an alliance of 27 of the leading cancer centers whose mission is "...to improve the quality, effectiveness, and efficiency of cancer care so patients can live better lives.". As part of their work, NCCN creates regularly updated clinical practice guidelines in oncology, including cancer genetics guidelines. The guidelines are free but users must register to access them. Below are links to their two cancer genetic guidelines.

- Genetic/Familial High-Risk Assessment: Breast and Ovarian Cancer, Version 1.2018- October 3, 2017. <a href="https://www.nccn.org/professionals/physician\_gls/pdf/genetics-screening.pdf">https://www.nccn.org/professionals/physician\_gls/pdf/genetics-screening.pdf</a>
- Genetic/Familial High-Risk Assessment: Colorectal, Version 3.2017, October 10, 2017.
   <a href="https://www.nccn.org/professionals/physician-gls/pdf/genetics-colon.pdf">https://www.nccn.org/professionals/physician-gls/pdf/genetics-colon.pdf</a>

#### **United States Preventive Services Task Force (USPSTF)**

"The USPSTF is a panel of experts in primary care and prevention who systematically reviews the evidence of effectiveness and makes recommendations for clinical preventive services."

<a href="https://www.uspreventiveservicestaskforce.org/Page/Name/recommendations">https://www.uspreventiveservicestaskforce.org/Page/Name/recommendations</a>. Below is a link to the recommendation on identifying women who have family members with breast, ovarian, tubal, or peritoneal cancer that may benefit from genetic counseling and possible genetic testing. The link includes five risk assessment tools that can be used to identify at risk women. This guideline applies only to women who have not had a personal cancer diagnosis.

Final Recommendation Statement: BRCA-Related Cancer: Risk Assessment, Genetic Counseling and Testing.
 <a href="https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/brca-related-cancer-risk-assessment-genetic-counseling-and-genetic-testing">https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/brca-related-cancer-risk-assessment-genetic-counseling-and-genetic-testing</a>

### Society of Gynecologic Oncology (SGO)

SGO is the medical specialty society for professionals that comprehensively manage gynecologic cancers and whose goal is to advance women's cancer care.

Of note, SGO recommends that <u>all</u> women with epithelial ovarian, peritoneal, or tubal cancers be offered genetic counseling and testing regardless of family history.

Clinical Practice Statement on Genetic Testing for Ovarian Cancer (October 2014).
 <a href="https://www.sgo.org/clinical-practice/guidelines/genetic-testing-for-ovarian-cancer/">https://www.sgo.org/clinical-practice/guidelines/genetic-testing-for-ovarian-cancer/</a>

#### American Congress of Obstetricians and Gynecologists (ACOG)

ACOG is the professional organization for obstetricians and gynecologists that aims to provide high quality education and continuously improve women's health care.

The ACOG committee recognizes that risk assessment is critical to identifying those who may be at increased risk of developing certain cancers and that the assessment should be performed and updated regularly. When an assessment indicates an increased risk, they recommend referral to a provider with expertise in cancer genetics for extensive risk assessment, counseling, and possible testing.

 Committee Opinion 634, Hereditary Cancer Syndromes and Risk Assessment, June 2015 (reaffirmed 2017). <a href="https://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-Opinions/Committee-On-Genetics/Hereditary-Cancer-Syndromes-and-Risk-Assessment">https://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-On-Genetics/Hereditary-Cancer-Syndromes-and-Risk-Assessment</a>

#### **ACOG** and **SGO** also have a joint practice bulletin that:

- ♦ Describes who are candidates for genetic counseling for hereditary breast and ovarian cancer syndrome.
- ♦ Discusses what issues should be addressed during genetic counseling.
- ♦ Reviews the testing approach that should be offered.
- Describes screening strategies and how to counsel women with BRCA1/2 mutations about reducing breast and ovarian cancer risk.
- ♦ Describes the technicalities of performing risk-reducing salpingo-oophorectomy.
  - ACOG/SGO Practice Bulletin #182 Hereditary Breast and Ovarian Cancer Syndrome, published in 2017. <a href="https://www.sgo.org/wp-content/uploads/2012/09/PB-182.pdf">https://www.sgo.org/wp-content/uploads/2012/09/PB-182.pdf</a>

## The Evaluation of Genomic Applications in Practice and Prevention Working Group (EGAPP)

The Evaluation of Genomic Applications in Practice and Prevention (EGAPP) Working Group was established in 2005 to among other roles develop practice recommendations based on evidence-based reviews. Below is a link to their Lynch syndrome practice recommendation.

 EGAPP Recommendation Statement: Summary of Findings on Genetic Testing for Lynch Syndrome. <a href="https://www.cdc.gov/genomics/gtesting/egapp/recommend/lynch\_provider.htm">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2743612/pdf/pmcce4.pdf</a> (full published paper)

# The American College of Medical Genetics and Genomics (ACMG) and the National Society of Genetic Counselors (NSGC)

ACMG is the primary professional organization for clinical and laboratory geneticists (MD and PhD). The NSGC is the professional organization for genetic counselors. Both organizations are involved in establishing practice standards and educating primary care providers about the appropriate use of genomic technologies. The recommendation statement linked below includes criteria for cancer genetics referral for a wide variety of cancer types in easy-to-read table format.

 A Practice Guideline from the ACMG and the NSGC: Referral Indications for Cancer Predisposition Assessment. <a href="https://www.nature.com/articles/gim2014147.pdf">https://www.nature.com/articles/gim2014147.pdf</a>