# Editorials

## Integrating Breast Cancer Risk Management into Primary Care

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**See related** U.S. Preventive Services Task Force Recommendation Statement at https://www.aafp.org/afp/2020/0315/od1.html and related Putting Prevention into Practice on page 373.

In 2019, the U.S. Preventive Services Task Force (USPSTF) updated two recommendation statements related to breast cancer: the *BRCA*-related cancer risk assessment, including evaluating for genetic counseling and testing,[1] and the use of preventive medication to reduce breast cancer risk.[2] Because approximately 10% of breast cancers are attributable to a genetic mutation (also called a pathogenic variant) and at least 11 genes are now known to increase the risk of breast cancer,[3,4] it is more important than ever that primary care physicians have the ability and resources to identify women eligible for genetic counseling and testing.

### Who Should Be Screened for Genetic Mutations?

Women with a family history of breast, ovarian, tubal, or peritoneal cancer and previously treated survivors of any of those cancers should be assessed for genetic risk. More than 16 million individuals are living with a history of cancer in the United States,[5] and more than 70% of cancer survivors receive health care from their primary care physician.[6] Individuals with a mutation may be eligible for high-risk breast cancer screening with annual mammography and breast magnetic resonance imaging, as well as risk-reducing measures such as surgery or chemoprevention.

### Useful Screening Tools

Family physicians should collect, review, and update patients' personal and family history annually. Validated screening tools *(Table 1[7-11])* are available for use in the clinic for identification of patients eligible for genetic risk assessment. The 7-Question Family History Screening tool is a patient-completed questionnaire; a single positive response should trigger recommendations for genetic risk assessment.[11] The Pedigree Assessment Tool is also brief and easy to use, but it requires scoring.[10] This tool would be best utilized by the clinician team to screen patients based on documented history. Each practice should identify a genetic expert for counseling and testing and should know where to refer patients after a pathogenic mutation has been identified.

### Risk Assessment and Chemoprevention

Beyond genetic risk assessment, all women without a personal history of breast cancer should be assessed for individualized breast cancer risk.

**TABLE 1**

**Screening Tools for Breast and Ovarian Cancer Genetic Risk Assessment**

| Tool | Website |
|---|---|
| Breast Cancer Genetics Referral Screening Tool[7] | https://www.breastcancergenescreen.org/ |
| Manchester scoring system[8] | https://www.researchgate.net/figure/Manchester-scoring-system_tbl1_7749080 |
| Ontario Family History Assessment Tool[9] | https://www.timeofcare.com/ontario-family-history-assessment-tool/ |
| Pedigree Assessment Tool[10] | https://www.timeofcare.com/pedigree-assessment-tool/ |
| 7-Question Family History Screening tool[11] | https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2739222/table/T1/ |

*Information from references 7-11.*

Breast cancer risk assessments have not been shown to increase worry and anxiety for women, and they improve understanding of breast cancer risk.[12,13] Use of the recently updated USPSTF recommendation requires physicians to quantify an individual's risk of breast cancer and to identify women who would most likely benefit from chemoprevention.[2] Most clinical trials assessing the effectiveness of risk-reducing medications (e.g., tamoxifen, raloxifene [Evista], aromatase inhibitors) used the Breast Cancer Risk Assessment Tool, also known as the Gail model, to define a woman as high risk with a threshold five-year breast cancer risk of greater than 1.66%.[14]

The updated USPSTF recommendations suggest that physicians offer risk-reducing medications to women at increased risk of breast cancer.[2] These antihormonal therapies have been shown to reduce the risk of breast cancer by 40% to 60% but have not demonstrated a survival benefit.[15-18] The Gail model can be completed in less than 60 seconds, but the shared decision-making process regarding chemoprevention is time-consuming. To help women make individualized decisions, physicians should discuss not only breast cancer risk, but also the adverse effects of medications, which include vasomotor symptoms, vaginal symptoms, and bone effects. Increased risk of uterine cancer occurs only with use of tamoxifen.

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