

### Tools to Assist with Family Breast Cancer History and Assessment

This list of resources was created in December 2023 for the Family Medicine Education Consortium, Inc. (FMEC), Hereditary Breast Cancer Quality Improvement pilot project. This list is not comprehensive but represents tools assembled via a literature and Internet search. The FMEC, Inc. does not endorse a specific questionnaire, but rather is providing this information and links so participating Family Medicine Residency Programs can select a questionnaire that best fits with their program and clinic needs.

Type of Tool	Name of tool and/or Creator/ Sponsor of tool	Link to Tool	Additional Comments
Family history questionnaire and scoring guide	Ambry Genetics (A Konica Minolta Company)	<a href="https://www.ambrygen.com/file/material/view/1365/Hereditary%20Cancer%20Question">https://www.ambrygen.com/file/material/view/1365/Hereditary%20Cancer%20Question</a>	Paper form. Comprehensive for all cancer types. Provides a provider checklist to indicate when genetic testing may be appropriate
Breast Cancer Risk Assessment	Breast Cancer Now	<a href="https://breastcancernow.org/about-breast-cancer/awareness/breast-cancer-in-families/family-history-assessing-your-breast-cancer-risk/">https://breastcancernow.org/about-breast-cancer/awareness/breast-cancer-in-families/family-history-assessing-your-breast-cancer-risk/</a>	This assessment will be able to tell you, based on your family history, what your risk of developing breast cancer may be. The risk assessment is carried out at a specialist family history clinic or a regional genetics center, depending on where you live. You will usually need to be referred by your GP.
Cancer Family History Questionnaire	Cancer.Net	<a href="https://www.cancer.net/sites/cancer.net/files/cancer_family_history_questionnaire.pdf">https://www.cancer.net/sites/cancer.net/files/cancer_family_history_questionnaire.pdf</a>	Paper form. Can be used for all cancer types.
Patient Facing Online Risk Calculator	Tyrer-Cuzick Risk Model (IBIS Breast Cancer Risk Evaluation Tool)	<a href="https://ibis-risk-calculator.magview.com/">https://ibis-risk-calculator.magview.com/</a>	The original link for the Tyrer-Cuzick Risk Model (IBIS Breast Cancer Risk Evaluation Tool) is no longer working ( <a href="http://www.ems-trials.org/riskevaluator/">http://www.ems-trials.org/riskevaluator/</a> ). Here is a link to a website that uses the tool. It is a for-profit medical software company. The link is provided here so one can

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			see the questionnaire. <a href="https://ibis-risk-calculator.magview.com/">https://ibis-risk-calculator.magview.com/</a>
Breast Cancer Risk Assessment Tool (BCRAT): Online Calculator	Gail Model	<a href="https://bcrisktool.cancer.gov/">https://bcrisktool.cancer.gov/</a>	<p>The BCRAT, also known as The Gail Model, allows health professionals to estimate a woman's risk of developing invasive breast cancer over the next five years and up to age 90 (lifetime risk).</p> <p>The tool uses a woman's personal medical and reproductive history and the history of breast cancer among her first-degree relatives (mother, sisters, daughters) to estimate absolute breast cancer risk-her chance or probability of developing invasive breast cancer in a defined age interval. This calculator takes about five minutes to complete.</p> <p><b>About the Calculator:</b> The tool has been validated for White women, Black/African American women, Hispanic women, and for Asian and Pacific Islander women in the United States.</p> <p>NOTE: The Gail, Claus and BRCAPRO models all significantly underestimated risk, although with a manual approach the accuracy of Claus tables may be improved by making adjustments for other risk factors. Breast Cancer Res. 2007; 9(5): 213</p> <p>With the Claus model, lifetime breast cancer risk estimates are based on family history. Unlike the Gail model, the Claus model considers the number and ages of onset of</p>

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			breast cancer in first- and second-degree relatives. It also distinguishes between maternal and paternal relatives.
Health Assessment and Risk Evaluation (Family Facing)	National Human Genome Research Institute	<a href="#">National Institutes of Health — Families SHARE: Sharing Health Assessment and Risk Evaluation</a>	Provides links to the Families SHARE disease risk worksheets and workbooks. The worksheets will help you work out family members' risk for these diseases based on their family health history.
Patient Facing Gene History Digital Risk Assessment	MyGeneHistory Myriad Genetics, Inc.	<a href="https://mygenehistory.com/demo/lang">https://mygenehistory.com/demo/lang</a> <a href="https://mygenehistory.com/demo/start">https://mygenehistory.com/demo/start</a>	MyGeneHistory is a digital assessment that asks questions about personal and family medical history. Quick and easy to complete. Results can help doctor provide more personalized care. This is a product from a for-profit company Myriad. <a href="https://myriad.com/hereditary-cancer-risk/patients/">https://myriad.com/hereditary-cancer-risk/patients/</a>
Family cancer history questionnaire	Invitae Corporation	<a href="https://familyhistory.invitae.com/pq/en/PBBef">https://familyhistory.invitae.com/pq/en/PBBef</a>	Electronic questionnaire. Comprehensive for all cancer types. Creates a pedigree. Collects information to complete a breast cancer risk assessment, such as Tyrer-Cuzick.
Scoring guide	Ontario Family History Assessment Tool	<a href="https://www.ncbi.nlm.nih.gov/books/NBK545866/">https://www.ncbi.nlm.nih.gov/books/NBK545866/</a>	<b>Risk Assessment, Genetic Counseling, and Genetic Testing for BRCA1/2-Related Cancer in Women: A Systematic Review for the U.S. Preventive Services Task Force [Internet].</b>  Recommended by USPSTF for BRCA-Related Risk Assessment1 A positive screen indicates an increased risk for breast cancer and genetic counseling referral is indicated. Meant to be used with a family history questionnaire.

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Scoring guide	Manchester Scoring System	<a href="https://www.ncbi.nlm.nih.gov/books/NBK545866/">https://www.ncbi.nlm.nih.gov/books/NBK545866/</a>	<p><b>Risk Assessment, Genetic Counseling, and Genetic Testing for BRCA1/2-Related Cancer in Women: A Systematic Review for the U.S. Preventive Services Task Force [Internet].</b></p> <p>Recommended by USPSTF for BRCA-Related Risk Assessment1 A positive screen indicates an increased chance to have a BRCA1 or BRCA2 mutation and a genetic counseling referral is indicated. Meant to be used with a family history questionnaire. Scroll down to view this section.</p>
Scoring guide	Referral Screening Tool	<a href="https://www.ncbi.nlm.nih.gov/books/NBK545866/">https://www.ncbi.nlm.nih.gov/books/NBK545866/</a>	<p><b>Risk Assessment, Genetic Counseling, and Genetic Testing for BRCA1/2-Related Cancer in Women: A Systematic Review for the U.S. Preventive Services Task Force [Internet].</b></p> <p>Recommended by USPSTF for BRCA-Related Risk Assessment1 A positive screen indicates a genetic counseling referral is indicated. Meant to be used with a family history questionnaire. Scroll down to view this section.</p>
Scoring guide	Pedigree Assessment Tool	<a href="https://www.ncbi.nlm.nih.gov/books/NBK545866/">https://www.ncbi.nlm.nih.gov/books/NBK545866/</a>	<p><b>Risk Assessment, Genetic Counseling, and Genetic Testing for BRCA1/2-Related Cancer in Women: A Systematic Review for the U.S. Preventive Services Task Force [Internet].</b></p> <p>Recommended by USPSTF for BRCA-Related Risk Assessment1 A positive screen indicates a genetic counseling referral is indicated. Meant to be used with a</p>

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			family history questionnaire. Scroll down to view this section.
Scoring guide	Seven-Question Family History Screening	<a href="https://www.ncbi.nlm.nih.gov/books/NBK545866/">https://www.ncbi.nlm.nih.gov/books/NBK545866/</a>	Recommended by USPSTF for BRCA-Related Risk Assessment1 A positive screen indicates a genetic counseling referral is indicated. Meant to be used with a family history. Scroll down to view this section.
Online Tool to Assess Hereditary Risk for Breast and Ovarian Cancer	Georgia Core Center for Oncology, Research & Education	<a href="https://www.georgiacancerinfo.org/breast-cancer-gene-screen">https://www.georgiacancerinfo.org/breast-cancer-gene-screen</a>	<p>A USPSTF recommended online screening tool that asks questions about family history to assess for Hereditary Cancer risk and possible benefit of additional information.</p> <p>This tool is designed to quickly identify who should be referred for cancer genetic counseling to formally evaluate their family history and discuss the benefits and limitations of genetic testing for Hereditary Cancer.</p> <p>Healthcare professionals, <a href="#">learn how to interpret this tool.</a></p>
Patient-Facing Online Breast & Ovarian Cancer Risk Assessment Quiz (previously Bright Pink's tool)	Dana-Farber Cancer Institute	<a href="https://assess-your-risk.dana-farber.org/">https://assess-your-risk.dana-farber.org/</a>	This tool is designed to help patients and family members learn more about personal risk for breast and ovarian cancers.

Related Reading

Kim G, Bahl M. Assessing Risk of Breast Cancer: A Review of Risk Prediction Models. J Breast Imaging. 2021 Feb 19;3(2):144-155. doi: 10.1093/jbi/wbab001. PMID: 33778488; PMCID: PMC7980704.

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Risk prediction models include: the modified Gail model/Breast Cancer Risk Assessment Tool (BCRAT); the Breast Cancer Surveillance Consortium (BCSC) model; the Rosner–Colditz model; the Tyrer–Cuzick (International Breast Intervention Study (IBIS) model); the Claus model; the BRCAPRO model; the Breast and Ovarian Analysis of Disease Incidence and Carrier Estimation Algorithm (BOADICEA); and, the Myriad model. The emerging role of AI for personalized risk prediction will also be highlighted.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7980704/>