# Provider Tips on Genetic Testing

## Frequently Asked Questions

Germline genetic testing can provide valuable information to patients with a personal and/or family history of cancer. Taking a family history and identifying those patients eligible for germline genetic testing is an important piece of comprehensive cancer care.

Learning if there is an underlying genetic cause for cancer in your patients can help to provide:

1. more targeted screening or cancer surveillance
2. options for targeted therapy
3. information for other relatives to be proactive about their cancer risk

A balanced discussion including importance and benefits of genetic testing, as well as potential risks, possible results, and information related to genetic discrimination (GINA) should all be reviewed with patients before obtaining informed consent for initiation of genetic testing.

**Who is eligible for genetic testing?** In general, patients with a personal or family history of *early onset cancer, multiple primary cancers, or a clustering of cancers on one side of the family* should consider genetic evaluation.

Specific cancer types and clinical features may warrant genetic evaluation/testing and are listed in the table below. It can be helpful to reference NCCN guidelines for the most up to date criteria for genetic evaluation.

| **Tumor type** | **Clinical history** |
|---|---|
| Breast | Age <50, bilateral tumors, triple negative cancer, metastatic |
| Colorectal | Age <50, multiple primary tumors, mismatch repair deficient (MSI-high) |
| Endometrial | Age <50, multiple primary cancers, mismatch repair deficient (MSI-high) |
| Pancreatic | Any personal/family history |
| Prostate | Metastatic, high-risk disease |
| Ovarian | Any personal/family history |

**How do I order genetic testing?** Genetic testing can be ordered in a few ways. Larger institutions may have an internal laboratory where testing can be ordered in-house. The more common situation is for practices to order germline genetic testing via a multi-gene panel through an external genetic testing laboratory (examples including Myriad, Invitae, Ambry, GeneDx, Color). When testing is sent out to an external genetic testing laboratory, the company will bill the patient's insurance directly or may have an option for patients to pay a much-reduced self-pay price.

**How much does genetic testing cost?** The cost of germline genetic testing for patients with cancer is generally less expensive than expected and has come down in price over the last few years.

When patients meet criteria for genetic testing based on their personal history or family history of cancer, most insurance companies cover all or part of testing.

A prior authorization can be completed before testing to provide the patient with an estimate of coverage and potential cost.

In addition, many genetic testing companies have the option to self-pay for testing without billing insurance. The patient will generally receive a bill of $250. Many companies also have patient assistance programs and payment plans available to help reduce the cost of testing.

If your institution or practice uses a specific laboratory, it may be helpful to reach out to them to see how they can assist in the billing process.

**How can I increase the likelihood that genetic testing will be covered by insurance?** It can be helpful to include the following in your clinical documentation related to genetic testing:

- Reason why patient meets criteria for genetic evaluation (example: NCCN 2.2021 recommends genetic counseling and genetic testing for all patients with personal history of pancreatic cancer)
- Appropriate ICD-10 codes related to personal/family history of cancer
- Benefit of genetic testing for your patient (for example, results will potentially impact treatment options such as PARP inhibitor or immunotherapy, potential impact to future cancer screening such as increased colonoscopy interval)

**What if I prefer to have someone else order genetic testing?** If you are not comfortable ordering testing yourself, you can refer your patient to a cancer genetics clinic to meet with a genetic counselor for an evaluation and discussion of genetic testing.

Some companies, such as Invitae and Color, also offer patient-initiated testing where patients can complete genetic counseling and coordinate testing via a saliva kit themselves. Genetic counselors are also available to meet with patients to discuss genetic test results and management after genetic testing is completed.

**Below is a list of resources to find genetic counselors/genetics service:**

***Michigan Department of Health & Human Services (MDHHS)***
https://www.michigan.gov/mdhhs/0,5885,7-339-73971_4911_4916_47257_68337_94208---,00.html

The Michigan Dept of Health and Human Services includes a Cancer Genomics Program, which works to reduce the impact of hereditary cancer on the people of Michigan and their families.

This program has a website and a hotline where patients can talk with someone who can answer questions about genetic testing and help you identify a genetics specialist. They also have a provider resource page outlining general best practices related to cancer genetic testing.

***Michigan Directory of Cancer Genetic Services Providers***
https://migrc.org/providers/michigan-cancer-genetics-alliance/mcga-directory-of-cancer-genetic-services-providers/

The Michigan Genetics Resources Center provides a list of locations and contact information for clinics that provide genetic counseling and genetic testing services throughout Michigan.

***Michigan Association of Genetic Counselors***
https://magcinc.org/genetic-counselors/genetic-services

A listing of genetic services in Michigan, searchable by name, location, and specialty. This list also includes non-cancer genetics clinics.

***National Directory of Cancer Genetic Services Providers***
https://findageneticcounselor.nsgc.org/?reload=timezone

The National Society of Genetic Counselors provides a directory of genetic counselors providing in-person and telehealth services in the United States and Canada.

## Additional resources

***GINA:***

- https://www.genome.gov/sites/default/files/genome-old/pages/PolicyEthics/GeneticDiscrimination/GINAInfoDoc.pdf
- http://ginahelp.org/#

***Hereditary cancer syndromes:***

- Hereditary Cancer-Related Syndromes
  https://www.cancer.net/navigating-cancer-care/cancer-basics/genetics/hereditary-cancer-related-syndromes
- Genetic/Familial High-Risk Assessment: Breast, Ovarian, and Pancreatic
  https://www.nccn.org/guidelines/guidelines-detail?category=2&id=1503
- Genetic/Familial High-Risk Assessment: Colorectal
  https://www.nccn.org/guidelines/guidelines-detail?category=2&id=1436