

# Premier Health Insuring Corporation

## POLICY AND PROCEDURE MANUAL

Policy Number: PA.055.PC  
Last Review Date: 02/09/2017  
Effective Date: 04/01/2017

### PA.055.PC – Molecular Susceptibility Testing for Breast Cancer and/or Ovarian Cancer (BRCA and BART Testing)

This policy applies to the following lines of business:

- ✓ Premier Health Insuring Corporation MA – DSNP

Premier Health Insuring Corporation considers **BRCA and BART Testing** medically necessary for the following indications:

#### **BRCA1/ BRCA2 Testing Indications:**

1. Individual from a family with a known deleterious BRCA1/BRCA2 mutation,
2. Personal History of Breast Cancer and one or more of the following:
  - a. Diagnosed age  $\leq$  45 years,
  - b. Two breast primaries, when first breast cancer was diagnosed age  $\leq$  50 years,
  - c. Diagnosed age  $\leq$  50 years with an additional breast cancer primary, one or more close blood relative with breast cancer at any age or with an unknown or limited family history,
  - d. Diagnosed age  $\leq$  60 years with a triple negative breast cancer,
  - e. Diagnosed at any age with one or more close blood relative breast cancer diagnosed  $\leq$  50 years,
  - f. Diagnosed at any age with two or more close blood relatives with breast cancer diagnosed any age,
  - g. Diagnosed at any age with one or more close blood relative with epithelial ovarian cancer,
  - h. Diagnosed at any age with two or more close blood relatives with pancreatic cancer or prostate cancer (Gleason score  $\geq$  7) at any age,
  - i. Close male blood relative with breast cancer.
  - j. For an individual of an ethnicity associated with a higher mutation frequency (e.g. Ashkenazi Jewish) no additional family history may be required.
3. Personal history of epithelial ovarian, fallopian tube, or primary peritoneal cancer,
4. Male with personal history of breast cancer,
5. Personal history of pancreatic cancer or prostate cancer (Gleason score  $\geq$  7) at any age with  $\geq$  1 close blood relatives with breast ( $\leq$  50 years) and/or ovarian and/or pancreatic or aggressive prostate cancer (Gleason score  $\geq$  7) at any age,
6. Personal history of pancreatic cancer at any age with  $\geq$  1 close blood relative with breast ( $\leq$  50 years) and/or invasive ovarian and/or pancreatic cancer at any age,
7. Personal history of pancreatic cancer, and Ashkenazi Jewish ancestry,
8. Family history only (significant limitations of interpreting test results for an unaffected individual should be discussed):

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- a. 1st or 2<sup>nd</sup> degree relative who meets any of the above criteria (1-5),
- b. 3<sup>rd</sup> degree relative with breast cancer and/or ovarian cancer with  $\geq 2$  close blood relatives with breast cancer (at least one with breast cancer  $\leq 50$  years) and/or ovarian cancer,
- c. Clinical judgment should be used to determine if the patient has a reasonable likelihood of a mutation, considering the unaffected patient's current age and the age of female unaffected relatives who link the patient with the affected relatives.
- d. Testing of unaffected individuals should only be considered when an appropriate affected family member is unavailable for testing.

### Testing Family Members

Occasionally, blood or tissue samples from other non-covered family members are required to provide the medical information necessary for the proper medical care of a member. **Such molecular-based testing for BRCA and other specific heritable disorders in non-members will be reviewed for medical necessity when all of the following conditions are met:**

1. The information is needed to adequately assess risk in the member
2. The information will be used in the immediate care plan of the member
3. The non-covered family member's benefit plan (if any) will not cover the test and the denial is based on specific plan exclusion.

**BART Testing** is indicated when the member meets the indications for BRCA 1/BRCA2 test, and has a negative result from the BRCA test.

### Limitations/Exclusions

1. Members post bone marrow transplant (allogeneic and autologous) should not have testing via blood or buccal samples (due to contamination of donor DNA). In these cases, DNA should be extracted from a fibroblast culture.
2. **Exclusions**
  - BRCA testing for assessment of risk of cancers other than breast or ovarian cancers is considered **Experimental and Investigational** and therefore not covered.
  - The following are not medically necessary and therefore not covered:
    - BRCA testing of members less than 18 years old.
    - \*\*\*BRCA testing performed primarily for the medical management of other family members that are not covered by an Evolent Health managed product is not a covered benefit for any Evolent Health managed product.

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### Background

Breast cancer is the second leading cause of cancer-related deaths for women. Between 5% and 10% of women with breast cancer develop the disease due to the inheritance of a mutated copy of the BRCA1 or BRCA2 gene. BRCA1 and BRCA2 are human genes that produce tumor suppressor proteins. These proteins help repair damaged DNA and, therefore, play a role in ensuring the stability of the cell's genetic material. Specific inherited mutations in *BRCA1* and *BRCA2* increase the risk of female breast and ovarian cancers, accounting for 20-25% hereditary breast cancers

About 12 percent of women in the general population will develop breast cancer sometime during their lives. By contrast, according to the most recent estimates, 55 to 65 percent of women who inherit a harmful BRCA1 mutation and around 45 percent of women who inherit a harmful BRCA2 mutation will develop breast cancer by age 70 years. About 1.3 percent of women in the general population will develop ovarian cancer sometime during their lives. By contrast, according to the most recent estimates, 39 percent of women who inherit a harmful BRCA1 mutation and 11 to 17 percent of women who inherit a harmful BRCA2 mutation will develop ovarian cancer by age 70 years.

Mutations in BRCA1 and BRCA2 are more common in certain racial/ethnic populations than others, including higher prevalence of mutations in Norwegian, Dutch, Icelandic and Ashkenazi Jewish peoples.

### Variations

#### For Medicare Members in Ohio:

Although there are still many unanswered questions regarding optimal clinical management of patients with inherited cancer-predisposing gene mutations, there is increasing data documenting potential benefits from increased surveillance, prophylactic surgery, hormonal manipulation, and changes in chemotherapy. Individuals who are carriers of a mutation, even if they have already been diagnosed and treated for a primary cancer, can be provided with additional information regarding their risk for further disease development and possible treatment and surveillance options.

For the covered syndromes noted below, those individuals who are determined not to be carriers may be prevented from undergoing unnecessary prophylactic surgery

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such as total versus partial colectomy, mastectomy, hysterectomy, and oophorectomy. Frequency of surveillance procedures (mammography, colonoscopy, etc.) may be affected depending on the presence or absence of a mutation.

Genetic tests for cancer are only a covered benefit for a **beneficiary with a personal history** of an illness, injury, or signs/symptoms thereof (i.e. clinically affected). A person with a personal history of a relevant cancer is a clinically affected person, even if the cancer is considered cured. Genetic testing is considered a non-covered screening test for patients unaffected by a relevant illness, injury, or signs/symptoms thereof.

Predictive or pre-symptomatic genetic tests and services, in the absence of past or present illness in the beneficiary, are **not** covered under national Medicare rules. For example, Medicare does not cover genetic tests based on family history alone.

A covered genetic test must be used to manage a patient. Medicare does not cover a genetic test for a clinically affected individual for purposes of medical research, family planning, disease risk assessment of other family members, when the treatment and surveillance of the beneficiary will not be affected or in any other circumstance that does not directly affect the diagnosis or treatment of the beneficiary.

The results of the genetic test should affect at least one of the management options considered by the referring physician in accordance with accepted standards of medical care :

- surgery,
- the extent of surgery,
- a change in surveillance,
- hormonal manipulation,
- or a change from standard therapeutic or adjuvant chemotherapy).

Genetic analysis must be provided through a laboratory which meets the following criteria:

The lab must meet appropriate Clinical Laboratory Improvement Amendment (CLIA) 1988 regulations;

Successful participation in the American College of Medical Genetics (ACMG)/College of American Pathologists (CAP) inspection and survey program;

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Appropriate state licensing; and

the laboratory director must hold an earned doctoral degree in a chemical, physical, biological or clinical laboratory science from an accredited institution and be certified and continue to be certified by a board approved by HHS.

### **Hereditary Breast and Ovarian Cancer Syndromes**

Families can be suspected of having hereditary breast or ovarian cancer based on occurrence at an early age, in multiple generations, often bilaterally, and in a pattern suggesting an autosomal dominant pattern of inheritance. The susceptibility may be transmitted through the maternal or paternal side of the family.

Germ-line alterations in two genes, BRCA1 and BRCA2, are associated with an increased risk of breast and ovarian cancer. Alterations in BRCA1 and BRCA2 explain many, but not all, of inherited forms of breast and ovarian cancer. With the identification of BRCA1 and BRCA2, it is now possible to test for abnormalities in the genes to provide information on the future risk of cancer and to make important treatment decisions in affected individuals.

Approximately five- to ten-percent of all breast cancers, and a similarly small percentage of ovarian cancers, are attributed to dominantly inherited susceptibility. Families at high risk of harboring a BRCA1 or BRCA2 mutation are those in which the incidence of breast or ovarian cancer suggests an autosomal dominant inheritance (50% chance of inheriting the disease causing mutation from an affected parent).

Men rarely develop breast cancer and, thus, there may not be an affected first-degree relative, and the size of the family may not permit analysis of possible autosomal dominant inheritance.

In patients with breast or ovarian cancer who are from high-risk families without a known BRCA1 or BRCA2 gene, the entirety of both genes must be analyzed to identify possible mutations. In those families with a known BRCA1 or BRCA2 gene mutation, only a single mutation site sequence is required. In the case of individuals with Ashkenazi Jewish ancestry, testing for 3 mutations common in this population may be warranted even after a single mutation has been identified in their family member. Then if negative, one should consider comprehensive ("Reflex") testing based on assessment of individual and family history as if the individual is of non-Ashkenazi Jewish descent.

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Testing of unaffected family members or other individuals - not diagnosed with cancer - is considered by Medicare to be screening and is not payable under the Medicare program.

Invasive and ductal carcinoma in situ (DCIS) breast cancers are included. Comprehensive genetic testing of BRCA1 and BRCA2 includes full sequencing and detection of large genomic rearrangements.

**BRCA1 and BRCA2 genetic testing is covered for a beneficiary who has or has had:**

- Breast cancer.
- Epithelial ovarian/fallopian tube/primary peritoneal cancer.

**Codes:**

| <b>CPT Codes</b> |  |
|------------------|--|
| Code             | Description  |
| 81211            | BRCA1, BRCA2 (breast cancer 1 and 2) (eg, hereditary breast and ovarian cancer) gene analysis; full sequence analysis and common duplication/deletion variants in BRCA1 (ie, exon 13 del 3.835kb, exon 13 dup 6kb, exon 14-20) |
| 81212            | BRCA1, BRCA2 (breast cancer 1 and 2) (eg, hereditary breast and ovarian cancer) gene analysis; 185delAG, 5385insC, 6174delT variants   |
| 81213            | BRCA1, BRCA2 (breast cancer 1 and 2) (eg, hereditary breast and ovarian cancer) gene analysis; uncommon duplication/deletion variants  |
| 81214            | BRCA1 (breast cancer 1) (eg, hereditary breast and ovarian cancer) gene analysis; full sequence analysis and common duplication/deletion variants (ie, exon 13 del 3.835kb, exon 13 dup 6kb, exon 14-20 del 26kb, exon 22 del) |
| 81215            | BRCA1 (breast cancer 1) (eg, hereditary breast and ovarian cancer) gene analysis; known familial variant   |
| 81216            | BRCA2 (breast cancer 2) (eg, hereditary breast and ovarian cancer) gene analysis; full sequence analysis   |
| 81217            | BRCA2 (breast cancer 2) (eg, hereditary breast and ovarian cancer) gene analysis; known familial variant   |

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### References

1. Antoniou A, Pharoah PD, Narod S, et al. Average risks of breast and ovarian cancer associated with BRCA1 or BRCA2 mutations detected in case series unselected for family history: a combined analysis of 22 studies. *Am J Hum Genet* 2003 May 72(5) 1117-30. <http://www.ncbi.nlm.nih.gov/pubmed/12677558>
2. Centers for Medicare & Medicaid (CMS). Local Coverage Determination (LCD) No. L34762 Molecular Diagnostic Testing (Contractor: Wisconsin Physicians Service Insurance Corporation). Revision Effective Date: 01/01/2017. RETIRED. <https://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=34762&ver=28&SearchType=Advanced&CoverageSelection=Both&NCSelection=NCA%7cCAL%7cNCD%7cMEDCAC%7cTA%7cMCD&ArticleType=SAD%7cEd&PolicyType=Final&s=42&Keyword=BRCA&KeywordLookup=Doc&KeywordSearchType=Exact&kq=true&bc=IAAABAAIAAAA%3d%3d>
3. Genetics Home Reference, Definition: Second-degree relative. U.S. National Library of Medicine, Published Sept. 22, 2014. <http://ghr.nlm.nih.gov/glossary=seconddegreerelative>
4. Myriad Laboratories: BRCA1 and BRCA2 Prevalence Tables for Mutations Detected by Sequencing, the 5-site Rearrangement Panel (LRP) and the BRCAAnalysis® Large Rearrangement Test (BART™) in High Risk Patients. Accessed 09/26/2013; Issued: 07/07/2011 <http://d1izdzz43r5o67.cloudfront.net/brac/BART-table-faq.pdf>
5. National Cancer Comprehensive Cancer Network, NCCN Clinical Practice Guidelines in Oncology™, Genetic /Familial High Risk Assessment: Breast and Ovarian Cancer, Hereditary Breast and/or Ovarian Cancer Testing Criteria, Version 2.2014 , Issued: 09/23/2014. [http://www.nccn.org/professionals/physician\\_gls/pdf/genetics\\_screening.pdf](http://www.nccn.org/professionals/physician_gls/pdf/genetics_screening.pdf)
6. National Cancer Institute. BRCA1 and BRCA2: Cancer Risk and Genetic Testing. Reviewed April 1, 2015. <http://www.cancer.gov/about-cancer/causes-prevention/genetics/brca-fact-sheet>
7. Palma MD, Domcheck SM, Stopfer J, et al: The relative contribution of point mutations and genomic rearrangements in BRCA1 and BRCA2 in high risk breast cancer families. *Cancer Res.* 2008 Sep 1;68(17):7006-14. doi: 10.1158/0008-5472.CAN-08-0599. Epub 2008 Aug 14 <http://cancerres.aacrjournals.org/content/68/17/7006.long>
8. The American Society of Clinical Oncology Policy Statement Update: Genetic and Genomic Testing for Cancer Susceptibility (posted online January 11, 2010). <http://jco.ascopubs.org/content/28/5/893.full.pdf+html>
9. Weitzel JN, Lagos VI et al: Evidence for common ancestral origin of a recurring BRCA1 genomic rearrangement identified in high risk Hispanic families. *Cancer*

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Epidemiol Biomarkers Prev. 2007 Aug;16(8):1615-20. Epub 2007 Jul 23.

<http://www.ncbi.nlm.nih.gov/pubmed/17646271>

10. U.S. Preventive Services Task Force (USPSTF) Recommendation Statement. Risk Assessment, Genetic Counseling, and Genetic Testing for BRCA-Related Cancer in Women. December 2013..

<http://www.uspreventiveservicestaskforce.org/uspstf/uspsbrgen.htm>

### **Disclaimer:**

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