

# What's the Difference? Methods for cancer risk assessment, prevention, and early detection.

# "When cancer is caught early, it is more treatable, less expensive and the chances of survival increase dramatically."

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Screening plays a crucial role in improving early cancer detection, but it is estimated that only about 30-40% of cancers are diagnosed at an early stage. At CancerCARE for Life, we view this as an opportunity to advocate for a holistic cancer care approach that encompasses prevention, early detection, care management, and survivorship.



Adhering to regular screenings and guidelines is essential for increasing early detection rates. However, the traditional, one-size-fits-all approach to cancer care has its limitations. Personalized strategies could be key to closing gaps in early detection.

In this article, we will explore both existing and emerging cancer screenings, placing each in the appropriate context to better understand their role in the fight against cancer.

### 1. Traditional Cancer Screening Tests

PURPOSE - Detecting cancer or precancerous conditions in individuals without symptoms.

### What it is

These are standard, widely accepted tests designed to detect specific cancers early in people without symptoms. Common cancer screenings include mammograms (for breast cancer), colonoscopies (for colorectal cancer), Pap smears (for cervical cancer), and prostate exams (for prostate cancer).

### When it's used

Cancer screens are generally used as part of regular preventive care, often when individuals are of a certain age or have risk factors for specific cancers.

### Who should consider it

Adults, especially those over certain ages (e.g., 50 and older), or those with a family history of cancer or other risk factors. Specific screenings for women such as Pap smears begin at age 21 and mammograms at age 45.

#### Cost

Typically covered by insurance if certain criteria are met.



### 2. Genetic Screening

# PURPOSE - Identifying inherited genetic mutations that increase cancer risk.

### What it is

This involves testing for specific genetic mutations that are known to increase the risk of developing certain cancers. For example, BRCA1 and BRCA2 mutations are associated with a higher risk of breast and ovarian cancers, while Lynch syndrome is linked to colorectal cancer.

### When it's used

Genetic screening is typically used for individuals with a family history of specific cancers, to assess whether they carry inherited mutations that increase their cancer risk.

### Who should consider it

People with a family history of cancer or those who have a known inherited risk of specific cancers.

#### Cost

Typically covered by insurance if certain criteria are met.

### 3. MCED (Multi-Cancer Early Detection)

PURPOSE - Detecting multiple cancers at an early stage using a single test - including those that may be difficult to detect with traditional screening methods (like ovarian or pancreatic cancer.)

### What it is

MCED is a type of blood test that screens for the presence of cancer markers associated with multiple types of cancers, often before symptoms appear. It analyzes molecular signals (such as DNA, RNA, or proteins) in the blood to identify cancer at an early stage. While MCED screening is available, the United States Preventive Services Task Force has not endorsed this approach.

### When it's used

While not yet routinely recommended, MCED tests can potentially be used to screen for more than 50 cancers before they are clinically apparent. MCED companies are recommending this test be repeated annually.

### Who should consider it

Typically used for adults of certain age groups (e.g., 50+) as a part of general cancer screening, especially when they do not show symptoms.

#### Cost

Not covered by insurance. Pricing can range from \$600 to \$2,000

### 4. Tumor DNA Analysis

PURPOSE - Analyzing tumor-specific genetic mutations to understand cancer's behavior and guide treatment.

### What it is

Tumor DNA analysis involves analyzing the DNA from a tumor (often through a blood sample or biopsy) to identify genetic mutations specific to the cancer cells. This can help determine the best course of treatment, such as targeted therapies or immunotherapies.

### When it's used

Tumor DNA analysis is commonly used after a cancer diagnosis to understand the cancer's genetic makeup, assess its potential for spreading, or determine the most effective treatment plan.

### Who should consider it

People who have already been diagnosed with cancer and are undergoing treatment decisions.

### Cost

Typically covered by insurance if certain criteria are met.



## **Summary of Differences**

Method	Purpose	Used For	Focus	Typical Users
Cancer Screens	Detecting specific cancers in asymptomatic individuals.	Routine screening for specific cancers.	Common cancers (e.g., breast, colon, cervical, prostate.)	People with risk factors or in screening age ranges.
Genetic Screening	Identifying inherited cancer risk.	Individuals with a family history of cancer.	Genetic mutations (e.g., BRCA1, BRCA2) linked to cancer.	Those with family history or known risk.
MCED	Early detection of multiple cancers.	As a preventive, early detection test.	Multiple cancers at an early stage (e.g., DNA, proteins.)	Adults (typically over 50) with no symptoms.
Tumor DNA Analysis	Analyzing tumor-specific mutations for treatment.	After cancer diagnosis, to guide treatment.	Genetic mutations and alterations in cancer cells.	People diagnosed with cancer.

Each of these methods plays a crucial role in cancer prevention, early detection, and treatment but are used at different stages or for different purposes in a person's cancer journey.

