

You are invited to participate in Beaumont's NEW Precision Health Program.

What is Beaumont's Precision Health program?

Beaumont is introducing a new program called Precision Health that provides our patients with the opportunity to be screened for known genetic conditions, allowing us to detect and potentially help you and your physician prevent specific diseases including hereditary forms of cancer and heart disease.

This new screening program will be available at **no cost** for a limited time at six primary care practices across Southeast Michigan. Your participation in this genetic health screen is completely voluntary.

What is genetic testing and what diseases will this test cover?

Genetic testing is a medical test done on the DNA found in the white blood cells present in your saliva sample. Genetic testing looks for changes, sometimes called mutations or variants, in your DNA. Your DNA sequences, called genes, code for proteins that have a specific function in your body. Some variations in DNA sequences are known to increase one's risk for a specific disease.

Beaumont's genetic health screen will look for variations in 147 different genes that could put you at risk for developing specific diseases in the future. These include, but are not limited to, hereditary cancers (breast, ovarian, uterine, colorectal, gastric, pancreatic, prostate, thyroid, renal, and melanoma), genetic forms of high iron levels, high blood pressure and high cholesterol, and heart diseases such as an enlarged heart or abnormal heart rhythms.

Can I participate?

All invited Beaumont patients aged 18 and up are eligible for the genetic health screen. Presently we are trialing this new Precision Health program for a limited time and with a limited number of participants until we are ready to expand this program.

How can I participate?

All patients who are interested in participating will need to have registered for a myBeaumontChart account. Within your account, you will have the opportunity to read and sign an informed consent, schedule a call with one of Beaumont's Genetic Counselors if you have questions, and gain access to your test results when they become available.

Once we have your signed consent, you will be asked to provide your DNA through a saliva sample. You will either receive a saliva collection kit in the mail or your physician may provide you with a kit from their office. For those kits arriving by mail, you can expect them to come to your home address we have on file in your myBeaumontChart within 2 weeks. Once your specimen kit is received, the specimen should be collected and shipped within 1 week.

To minimize any issues with your saliva collection, you should wait at least 30 minutes after you eat, drink, chew gum, or smoke. If you are completing the sample at home, you can follow the specimen labelling and shipping instructions that are provided inside the kit. Attach the shipping label and bring this to your closest FedEx depot for shipping to the lab. If you are completing sample collection within your physician's office, their staff will assist you with shipping the specimen kit to the lab.

Once your specimen kit is shipped to the lab, the Beaumont Precision Health team will be tracking your specimen and you can expect your results to be available within 3 to 6 weeks. One of our Beaumont Genetic Counselors will call you with your test results at the phone number listed in your myBeaumontChart. We will provide you with a detailed overview of the findings and what the results mean before they are uploaded into your myBeaumontChart account. Your primary care physician will also be informed of the results.

What are the possible results?

Your genetic test will come back as either *negative* (meaning there are no genetic variations found) or *positive* (meaning one or more genetic variations were identified). It's important to recognize that most results will come back negative.

If your test results are **negative**, this means you do not have a known genetic variation that is associated with an increased risk of developing a specific medical condition. You are still at risk for developing diseases in the future, but your risk is not increased above the general population risk. Your physician will continue to screen you for health concerns during your routine visits based on your age, and clinical and family histories.

If your test results are **positive**, this means that you inherited one or more genetic variations that indicates you may be at an elevated risk of developing a specific medical condition. It is important to note that a positive result does not mean that you have a 100% risk of developing the disease. Your physician will develop a screening and prevention program with you to help lower your risk and/or to identify disease early when there are more treatment options for a better health outcome in the future.

Regardless of whether you have a negative or positive result, one of our Beaumont Genetic Counselors will personally call you to discuss your test results once these become available and they will share these results with your physician.

If your results are positive, you will be invited to schedule a follow-up appointment with your physician for any further care instructions that could include additional testing and screening, lifestyle recommendations, and other preventative care measures. You can also have a follow-up discussion with the Genetic Counselor for more information at no cost. Several educational materials will be made available to you to support your understanding of your genetic diagnosis.

All test results will be uploaded into your myBeaumontChart account and a paper copy will be personally mailed to you.

Can my family get tested?

If your test results come back positive, this means that close blood relatives have a 50% chance of also carrying the same genetic variation. We will offer free testing to your family within 90 days of your test results. One of our Beaumont Genetic Counselors will discuss this with you and help your family members arrange further testing.

How is my health and genetic information protected?

The privacy and protection of your health information is our top priority. Beaumont (and our lab partner Invitae) both follow all regulations of HIPAA – the Health Insurance Portability and Accountability Act, ensuring your information is safe and secure.

There is also a Federal law that protects you from discrimination from health insurers and employers called the Genetic Information Nondiscrimination Act (GINA). This doesn't currently cover life, disability, or long-term care insurance. Our Beaumont Genetic Counselors can answer any questions that you have.

How can I learn more information?

We want you to make an informed decision around whether participating in our Precision Health screen is right for you. Schedule a 10-minute phone consultation with a Precision Health team member through your myBeaumontChart. We are here to answer all your questions.

Disorders Tested For:

Breast cancer

Ovarian cancer

Uterine cancer

Colorectal cancer

Cutaneous melanoma

Gastric cancer

Pancreatic cancer

Prostate cancer

Renal cell cancer

Thyroid cancer

Aortopathies

Arrhythmias

Cardiomyopathies

Thrombophilia

Genetic forms of high blood pressure and high cholesterol

Malignant hyperthermia susceptibility

Hereditary hemochromatosis

Alpha-1 antitrypsin deficiency