

PERSONALIZED MEDICINE

Using the latest in genetics to improve health

Along with factors like your age, environment, family history and lifestyle habits, your genetic makeup can help your clinician assess your personal risk for disease. Now there's a revolutionary new tool that takes genetic testing one step further. Endeavor Health, in collaboration with GenomicMD, is among the first in the nation to offer polygenic risk score (PRS) tests.

What is a PRS test?

A PRS test predicts how likely you are to get a specific disease by analyzing genomic variations. Doctors can use this information to help prevent disease or detect it at its earliest, most treatable stage. Endeavor Health offers PRS tests to help determine your genetic risk for these conditions:

- Heart conditions (CAD, AFib, AAA)
- Diabetes (types 1 and 2)
- Prostate cancer
- Chronic kidney disease
- Enlarged prostate (BPH—benign prostatic hyperplasia)
- Obesity

What is involved?

The PRS test is either a saliva or blood sample. The sample can be collected in your provider's office or with a saliva collection kit conveniently shipped to your home. The DNA sample is analyzed in a lab, and you receive a test result that informs if you are at increased or average risk for each disease. Your care team will follow up about how this information can be used to tailor your care plan.

What are the benefits?

A PRS test is just one part of a complete evaluation by your doctor and can give you a comprehensive, quantitative assessment of your inherited health risks. For many conditions, research indicates that PRS can identify many more at-risk patients than self-reported family history of disease alone. The test can help predict how a disease will progress and how well you would respond to treatment to guide healthcare decisions and help your doctor:

- Recommend lifestyle changes to prevent disease
- Recommend more frequent screenings to detect disease early
- Establish treatment plans to help slow disease progression
- Find novel therapeutic interventions to treat a disease
- Tailor medical interventions, including drug therapies, to your needs

What else should you know?

A PRS can only explain your relative risk for a disease as a probability, not as a certainty. People with the same score can have different lifetime risks of the disease, so a higher score doesn't guarantee a health issue will develop and a lower score doesn't mean it won't develop either. Research is ongoing to better understand the uses and limitations of PRS tests.

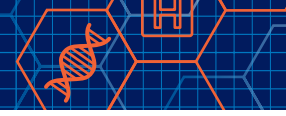
Your genetic information is protected under HIPAA and the Genetic Information Non-Discrimination Act (GINA).

Interested in a PRS test?

Talk to your doctor if you are interested in the PRS test. You may want to get tested if you have a family history or other risk factors. Endeavor Health will initially make testing available at select Medical Group Specialty offices, with plans to expand across the system. If you are interested in testing, please contact 847-570-GENE. The test is not covered by insurance. The cost is \$250 out-of-pocket.



For more information, please visit
northshore.org/personalized-medicine



History of Personalized Medicine at Endeavor Health

Endeavor Health has been leading the way in genomic-based personalized medicine, research and technology to identify risk, detect disease and customize treatment for patients. By learning about patients on a molecular level, down to their DNA, we can tailor prevention strategies and medical interventions to each patient's needs so they are empowered to lead long, healthy lives.

1989 **The vision is created.** One year before the Human Genome Project is launched, Dr. Janardan Khandekar pens the first proposal to develop programs based on molecular pathology at NorthShore University Health System, now Endeavor Health.

1997 The **Center for Medical Genetics** launches, using the latest technologies and risk assessment tools to investigate the whole spectrum of hereditary diseases and tailor therapies to each patient. Dr. Henry Lynch (from which Lynch Syndrome takes its name) serves as key clinical advisor on program design.

2010 The **DoDoNA Project** launches, which has since enrolled more than 10,000 patients in genetic studies to predict, prevent and treat a variety of neurological conditions.

2016 NorthShore develops tools to integrate genomic information into the **Electronic Medical Record System (EMR)** with alerts to help tailor patient treatment.

2023 Endeavor Health is among the first in the nation to offer **polygenic risk score (PRS) tests** to patients—a revolutionary new genomic tool that evaluates patients' risk for 20 different diseases to help physicians tailor prevention strategies and medical interventions to their needs.

1992 The **Molecular Diagnostics Laboratory** is established, one of the first in the country, now performing more than 10,000 genomic tests per year.

2003 The **NorthShore Research Institute** establishes the **Center for Psychiatric Genetics** to study the genetic patterns and molecular information of complex psychiatric disorders such as schizophrenia.

2014 The **Genomic Health Initiative (GHI)** strives to uncover new DNA-based discoveries by investigating how an individual's genetic makeup impacts the development of disease and treatment options for it.

2015 The **Pharmacogenomics Clinic** launches to help select effective, targeted drug therapies for each individual and reduce the potential trial-and-error in prescribing medications. The clinic was one of the first in the country and has served as a model for numerous other institutions across the globe.

2017 A **Genetic and Wellness Assessment (GWA)** is offered to patients during their annual physical with their primary care physician. The GWA determines the patient's risk for certain health conditions. To date, more than 200,000 patients have completed the GWA.

The Center for Medical Genetics changes its name to the **Mark R. Neaman Center for Personalized Medicine**, one of the largest medical genetics centers in the Midwest.

What's Next? Endeavor Health continues to distinguish itself as a national leader by bringing genomics to the frontlines of care and ushering in new research that creates medical advancements and personalized care to patients today and in the future.

