Picture™

FOR CLINICIANS

Picture Wellness Information Sheet

Who is Picture Genetics?

Picture Genetics puts patients first by providing at-home, clinical-grade genetic testing products paired with certified genetic counselor guidance. Our test results are designed to be straightforward and clinically actionable. Analysis for Picture Genetics tests is performed at Fulgent Genetics, a CLIA-certified and CAP-accredited diagnostic laboratory working with physicians from more than 700 institutions around the world.

What is the Picture Wellness test?

Picture Wellness is a physician-backed, patient-oriented, proactive genetic test that assesses an individual's risk of developing certain hereditary cancers, cardiovascular diseases, and other clinically important genetic conditions. Specifically, Picture Wellness analyzes 81 genes associated with these conditions, which have been deemed medically actionable by the American College of Medical Genetics and Genomics (ACMG; D.T. Miller et al., 2023). Picture Wellness is unique in that it can be easily ordered and completed from home, but still includes physician involvement from an independent physician network (PWNHealth) and genetic counseling support for your patient.

Who should order this test?

Picture Wellness is for healthy adults without a strong personal or family history of cancer, cardiovascular, metabolic, or other genetic disease. This test helps determine risk for those not already aware of it — if an individual has symptoms of a condition or has a strong family history, they should discuss genetic testing options with their doctor or genetic counselor to determine the most appropriate testing.

What are the benefits this test can provide?

Picture Wellness helps define your patient's genetic risks for certain cancers, cardiovascular conditions, and other clinically important genetic conditions. Knowing one's genetic risk gives you the power to make more informed decisions for your patient's long-term health. All cancers and cardiovascular diseases that we test for are conditions that doctors can help manage and can even possibly prevent symptoms. Actionable preventative steps can include diet and lifestyle changes, increased clinical surveillance and monitoring, and pharmacological treatments.

Can insurance help pay for this test?

Picture Genetics currently does not support insurance payments for our tests.

A snapshot of test specifications

Coverage ~99% at 20x **Turnaround Time** 3-5 weeks **Specimen Type** Saliva

Genes Tested 81 total | Cancer (28), Cardio (40), Other (13)
Analysis Sequencing & Deletion/Duplication

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Reporting	Only variants classified as "Pathogenic" or "Likely Pathogenic" using the ACMG guidelines for sequence variant interpretation will be reported. We will not report Variants of Uncertain Significance (VUS).
Detection rate	A broad range of laboratory and bioinformatic tools are employed to ensure the highest detection rate. Picture Wellness's analytical detection rate for all genes is >98%.
Test methods	**Next generation sequencing and deletion/duplication analysis** Sequencing reads the DNA code of the selected genes, one base at a time, to determine an individual's sequence. The sequence is then compared to a reference DNA sample to detect any variants found within the patient's DNA. Next generation sequencing (NGS) is used to analyze exons in multiple genes simultaneously. Picture Genetics uses a sophisticated method that detects sequence changes and deletions/duplications (del/dups) via NGS. Pathogenic variants found by this method are confirmed by Sanger sequencing, MLPA, or quantitative PCR (qPCR).
Test limitations	All laboratory tests have limitations. A positive result does not imply that there are no other mutations in the patient's genome, and negative results do not eliminate the risk of developing cancer, cardiovascular disease, or other genetic disorders. Picture Wellness is not designed to detect somatic mutations. Mutations that are not located in the exons of genes may not be detected by this test.

If you have questions, feel free to call or email us.

PICTURE WELLNESS

Genes and Conditions Tested

Gene / Condition Name

ACTA2 - Heritable thoracic aortic disease (HTAD)
ACTC1 - Familial hypertrophic cardiomyopathy (FHCM)
ACVRL1 - Hereditary hemorrhagic telangiectasia type 2
APC - APC-associated polyposis
APOB - Familial Hypercholesterolemia
ATP7B - Wilson disease
BAG3 - Dilated Cardiomyopathy
CALM1 - Long QT syndrome
CALM2 - Long QT syndrome
CALM3 - Long QT syndrome
BMPR1A - Juvenile polyposis syndrome
BRCA1 - Hereditary breast and ovarian cancer syndrome
BRCA2 - Hereditary breast and ovarian cancer syndrome
BTD - Biotinidase deficiency
CACNA1S - Malignant hyperthermia
CASQ2 - Catecholaminergic polymorphic ventricular tachycardia (CPVT)
COL3A1 - Heritable thoracic aortic disease (HTAD)
COL3A1 - Ehlers-Danlos syndrome, type 4
DES - Dilated Cardiomyopathy
DSC2 - Familial arrhythmogenic right ventricular cardiomyopathy (ARVC)
DSG2 - Familial arrhythmogenic right ventricular cardiomyopathy (ARVC)
DSP - Familial arrhythmogenic right ventricular cardiomyopathy (ARVC)
ENG - Hereditary hemorrhagic telangiectasia type 1
FBN1 - Heritable thoracic aortic disease (HTAD)
FBN1 - Marfan syndrome
FLNC - Dilated Cardiomyopathy
GAA - Pompe disease
GLA - Fabry disease
HFE - Hereditary hemochromatosis
HNF1A - Maturity-Onset Diabetes of the Young (MODY)
KCNH2 - Long QT syndrome
KCNQ1 - Long QT syndrome
LDLR - Familial Hypercholesterolemia
LMNA - Familial dilated cardiomyopathy
MAX - Hereditary paraganglioma-pheochromocytoma syndrome

PICTURE WELLNESS

Genes and Conditions Tested

Gene / Condition Name

MEN1 - Multiple endocrine neoplasia
MLH1 - Lynch syndrome
MSH2 - Lynch syndrome
MSH6 - Lynch syndrome
MUTYH - MUTYH-associated polyposis
MYBPC3 - Familial dilated cardiomyopathy
MYBPC3 - Familial hypertrophic cardiomyopathy (FHCM)
MYH11 - Heritable thoracic aortic disease (HTAD)
MYH7 - Familial hypertrophic cardiomyopathy (FHCM)
MYL2 - Familial hypertrophic cardiomyopathy (FHCM)
MYL3 - Familial hypertrophic cardiomyopathy (FHCM)
NF2 - Neurofibromatosis type 2
OTC - Ornithine transcarbamylase deficiency
PALB2 - Hereditary Breast Cancer
PCSK9 - Familial Hypercholesterolemia
PKP2 - Familial arrhythmogenic right ventricular cardiomyopathy (ARVC)
PMS2 - Lynch syndrome
PRKAG2 - Familial hypertrophic cardiomyopathy (FHCM)
PTEN - PTEN hamartoma tumor syndrome
RB1 - Retinoblastoma
RBM20 - Dilated Cardiomyopathy
RPE65 - Leber Congenital Amaurosis/Early onset severe retinal dystrophy
RET - Multiple endocrine neoplasia
RET - Familial medullary thyroid carcinoma
RYR1 - Malignant hyperthermia
RYR2 - Catecholaminergic polymorphic ventricular tachycardia (CPVT)
SCN5A - Brugada syndrome
SCN5A - Long QT syndrome
SDHAF2 - Paragangliomas
SDHB - Paragangliomas
SDHC - Paragangliomas
SDHD - Paragangliomas
SMAD3 - Heritable thoracic aortic disease (HTAD)
SMAD3 - Loeys-Dietz syndrome
SMAD4 - Juvenile polyposis syndrome

PICTURE WELLNESS

Genes and Conditions Tested

Gene / Condition Name

STK11 - Peutz-Jeghers syndrome
TGFBR1 - Heritable thoracic aortic disease (HTAD)
TGFBR1 - Loeys-Dietz syndrome
TGFBR1 - Marfan syndrome
TGFBR2 - Heritable thoracic aortic disease (HTAD)
TBFBR2 - Loeys-Dietz syndrome
TMEM43 - Familial arrhythmogenic right ventricular cardiomyopathy (ARVC)
TMEM127 - Hereditary paraganglioma-pheochromocytoma syndrome
TTN - Dilated Cardiomyopathy
TNNC1 - Dilated Cardiomyopathy
TNNI3 - Familial hypertrophic cardiomyopathy (FHCM)
TNNT2 - Left ventricular noncompaction (LVNC)
TP53 - Li-Fraumeni syndrome
TPM1 - Familial hypertrophic cardiomyopathy (FHCM)
TRDN - Long QT Syndrome
TSC1 - Tuberous sclerosis
TSC2 - Tuberous sclerosis
TTR - Hereditary TTR amyloidosis
VHL - Von Hippel-Lindau syndrome
WT1 - Wilms' tumor

