Harvard Pilgrim Health Care | TUFTS Health Plan

Point32Health companies

Medical Necessity Guidelines:

Genetic Testing-Molecular Pathology Procedures

Effective: November 4, 2026

Prior Authorization Required If REQUIRED, submit supporting clinical documentation (electronically recommended or by fax)	Yes ☒ No ☐
Notification Required	Yes ☐ No ☒

Applies to:

- Tufts Health Plan Senior Care Options
- Tufts Medicare Preferred HMO/PPO

We recommend submitting prior authorization electronically. If you opt to submit prior authorization requests via fax, please refer to this reference chart for the appropriate fax number (varies by product).
For details on all our products, please visit the Our Plans page on our provider website. For additional Prior Authorization and Notification details on other lines of business not listed on our Medical Necessity Guidelines page, please also reference our Prior Authorization Resources page.

Note: While you may not be the provider responsible for obtaining prior authorization or notifying Point32Health, as a condition of payment you will need to ensure that any necessary prior authorization has been obtained and/or Point32Health has received proper notification. If notification is required, providers may additionally be required to provide updated clinical information to qualify for continued service.

Overview

Genetic and molecular testing/screening can be used to provide information regarding risk and prevention of disease, aid in confirmation of a diagnosis, provide information regarding prognosis of a disease, and provide information to aid in treatment decision making. Molecular testing in oncology can be used to diagnose solid tumor and blood cancers, select targeted treatment(s), and monitor response to treatment. Targeted treatments can require specific molecular profiling which identifies an individual who may benefit from the targeted therapy. A drug's labeling may include information regarding molecular testing necessary to select appropriate candidates for the drug.

All requests for Genetic Testing must be submitted via the Genetic Testing form (Genetic-and-Molecular-Diagnostic-Testing-form.pdf (point32health.org)) and faxed to the appropriate fax number listed above according to Plan. Include all relevant clinical information as applicable.

The Plan uses guidance from the Centers for Medicare and Medicaid Services (CMS) and MassHealth for coverage determinations for its Dual Product Eligible plan members. CMS National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), Local Coverage Articles (LCAs) and documentation included in the Medicare manuals and MassHealth Medical Necessity Determinations are the basis for coverage determinations. For Tufts Health Senior Care Options and Tufts Medicare Preferred plan members, the following is used: LCD - Molecular Pathology Procedures (L35000) (cms.gov) and Article - Billing and Coding: Molecular Pathology Procedures (A56199) (cms.gov)

Clinical Guideline Coverage Criteria

General Genetic Testing Criteria

The Plan may cover genetic testing when **all** of the following criteria are met:

1. Alternative laboratory or clinical tests to definitively diagnose the disorder/identify the condition are unavailable or results are clearly equivocal; **and**
2. Availability of a clinically valid test, based on published peer reviewed medical literature; **and**
3. Testing assay(s) are Food and Drug Administration (FDA) approved/cleared or if LDT (lab developed test) or LDT protocol or FDA modified test(s) the laboratory documentation should support assay(s) of analytical validity and clinical utility; **and**

4. Results of the testing must directly impact treatment or management of the Medicare beneficiary; **and**
5. For testing panels, including but not limited to, multiple genes or multiple conditions, and in cases where a tiered approach/method is clinically available, testing would be covered ONLY for the number of genes or test that are reasonable and necessary to obtain necessary information for therapeutic decision making; **and**
6. Individual has not previously received genetic testing for the disease/condition. In general, diagnostic genetic testing for a disease should be performed once in a lifetime. Exceptions include clinical scenarios whereby repeat testing of somatically-acquired mutations (for example, pre- and post- therapy) may be required to inform appropriate therapeutic decision-making.

The following list of Genetic Tests use the above listed criteria for coverage only. Please use the LCA link in the overview to view the covered ICD-10 codes for each of the specific genetic tests below.

Test	Codes
ACE	81400
ASXL1 (ADDITIONAL SEX COMBS LIKE 1, TRANSCRIPTIONAL REGULATOR)	81175, 81176
ATN1 (ATROPHIN 1)	81177
ATXN1 (ATAXIN 1)	81178
ATXN2 (ATAXIN 2)	81179
ATXN3 (ATAXIN 3)	81180
ATXN7 (ATAXIN 7)	81181
ATXN8OS (ATXN8 OPPOSITE STRAND [NON-PROTEIN CODING])	81182
ATXN10 (ATAXIN 10)	81183
BTK (BRUTON'S TYROSINE KINASE)	81233
CACNA1A (CALCIUM VOLTAGE-GATED CHANNEL SUBUNIT ALPHA1 A)	81184
CACNA1A (CALCIUM VOLTAGE-GATED CHANNEL SUBUNIT ALPHA1 A)	81185, 81186
CBFB- MYH11	81401
CDKN2A (cyclin-dependent kinase inhibitor 2A)	81404
CNBP (CCHC-TYPE ZINC FINGER NUCLEIC ACID BINDING PROTEIN)	81187
CSTB (CYSTATIN B)	81188, 81189, 81190
CYTOGENOMIC NEOPLASIA (GENOME-WIDE) MICROARRAY ANALYSIS	81277
DRUG METABOLISM (EG, PHARMACOGENOMICS) GENOMIC SEQUENCE ANALYSIS PANEL	81418
E2A/PBX1	81401
EML4-ALK	81401
EPILEPSY GENOMIC SEQUENCE ANALYSIS PANEL	81419
ETV6-RUNX1	81401
EWSR1	81401
EZH2	81236, 81237
F13B	81400
F7	81400
F8 (coagulation factor VIII)	81403
F11coagulation factor XI	81401
FGB	81400
FIP1L1-PDGFR	81401
FOXO1	81401
IDH1 (ISOCITRATE DEHYDROGENASE 1 [NADP+], SOLUBLE)	81120

Test	Codes
IDH2 (ISOCITRATE DEHYDROGENASE 2 [NADP+], MITOCHONDRIAL)	81121
IGK@ (IMMUNOGLOBULIN KAPPA LIGHT CHAIN LOCUS)	81264
INHERITED BONE MARROW FAILURE SYNDROMES (IBMFS)	81441
MLH1 (MUTL HOMOLOG 1, COLON CANCER, NONPOLYPOSIS TYPE 2)	81288, 81292, 81293, 81294
MSH2 (MUTS HOMOLOG 2, COLON CANCER, NONPOLYPOSIS TYPE 1)	81295, 81296, 81297
MSH6 (MUTS HOMOLOG 6 [E. COLI])	81298, 81299, 81300
MUTYH (mutY homolog [E.coli])	81401
NPM/ALK	81401
NTRK1 (NEUROTROPHIC RECEPTOR TYROSINE KINASE 1)	81191
NTRK2 (NEUROTROPHIC RECEPTOR TYROSINE KINASE 2)	81192
NTRK3 (NEUROTROPHIC RECEPTOR TYROSINE KINASE 3)	81193
NTRK (NEUROTROPHIC RECEPTOR TYROSINE KINASE 1, 2, AND 3)	81194
NUDT15 (NUDIX HYDROLASE 15)	81306
ONCOLOGY (CUTANEOUS MELANOMA), MRNA	81529
ONCOLOGY (UVEAL MELANOMA), MRNA	81552
ONCOLOGY (PROSTATE), MRNA	81542
PABPN1 (POLY[A] BINDING PROTEIN NUCLEAR 1)	81312
PALB2 (PARTNER AND LOCALIZER OF BRCA2)	81307, 81308
PAX8/PPARG	81401
PIK3CA (PHOSPHATIDYLINOSITOL-4, 5-BIPHOSPHATE 3-KINASE, CATALYTIC SUBUNIT ALPHA)	81309
PLCG2 (PHOSPHOLIPASE C GAMMA 2)	81320
PMS2 (POSTMEIOTIC SEGREGATION INCREASED 2 [S. CEREVISIAE]	81317, 81318, 81319
PPP2R2B (PROTEIN PHOSPHATASE 2 REGULATORY SUBUNIT BBETA)	81343
PRSS1 (protease, serine, 1 [trypsin 1])	81404
PTEN (PHOSPHATASE AND TENSIN HOMOLOG)	81321, 81322, 81323
PULMONARY DISEASE (IDIOPATHIC PULMONARY FIBROSIS [IPF]), MRNA	81554
RUNX1 (RUNT RELATED TRANSCRIPTION FACTOR 1)	81334, 81401
SF3B1 (SPLICING FACTOR [3B] SUBUNIT B1)	81347
SRSF2 (SERINE AND ARGININE-RICH SPLICING FACTOR 2)	81348
SOLID ORGAN OR HEMATOLYMPHOID NEOPLASM OR DISORDER	81456
TBP (TATA BOX BINDING PROTEIN)	81344
TERT (TELOMERASE REVERSE TRANSCRIPTASE)	81345
TGFBI (TRANSFORMING GROWTH FACTOR BETA-INDUCED)	81333
TPMT (THIOPURINE S-METHYLTRANSFERASE)	81335
U2AF1 (U2 SMALL NUCLEAR RNA AUXILIARY FACTOR 1)	81357
UNLISTED MULTIANALYTE ASSAY WITH ALGORITHMIC ANALYSIS	81599
VHL (von Hippel-Lindau tumor suppressor)	81404
ZRSR2 (ZINC FINGER CCCH-TYPE, RNA BINDING MOTIF AND SERINE/ARGININE-RICH 2)	81360

Test	Codes
Unlisted Genetic Testing	81479
Miscellaneous	81265, 81266, 81301

Genetic Test Specific Criteria

In addition to the above criteria that is applicable for **ALL** genetic testing, the below list of genetic tests also has specific criteria within the LCD. Please use the LCD link in the overview to view the additional criteria for each of the specific genetic tests below, and LCA to view the covered ICD-10 codes for each of the specific genetic tests below.

Test	Code(s)
ABL1 (ABL proto-oncogene 1, non-receptor tyrosine kinase)	81170
ATP7B (ATPase, Cu++ transporting, beta polypeptide)	81406
BCR/ABL	81206, 81207, 81208
BLM (Bloom syndrome, RecQ helicase-like)	81209
BRAF	81210
BRAC1	81212,81215, 81216, 81162 81163, 81164, 81165, 81166
BRAC2	81216, 81217, 81167,
Cardiology (heart transplant), mRNA	81595
CEBPA (CCAAT/enhancer binding protein [C/EBP], alpha)	81218
CALR (calreticulin)	81219
CCND1/IGH (BCL1/IgH, t)	81168
CFTR (cystic fibrosis transmembrane conductance regulator)	81220, 81221, 81222, 81223, 81224
Chimerism analysis	81267, 81268
CYP2C6	81225
CYP2C9 (cytochrome P450, family 2, subfamily D polypeptide 9) *for Warfarin response see below	81227
CYP2D6 (cytochrome P450, family 2, subfamily D polypeptide 6)	81226, 0070U
EGFR (epidermal growth factor receptor)	81235
FLT3 (FMS-RELATED TYROSINE KINASE 3)	81245, 81246
HFE (hemochromatosis)	81256
HLA	81370, 81371, 81372, 81373, 81374, 81375, 81376, 81377, 81378, 81379, 81380, 81381, 81382, 81383,
HUMAN PLATELET ANTIGEN 1-15	81105, 81106, 81107, 81108, 81109, 81110, 81111, 81112
IGH@ (Immunoglobulin heavy chain locus)	81261, 81262, 81263
JAK2 (JANUS KINASE 2)	81270, 0027U, 81279,
KIT (V-KIT HARDY-ZUCKERMAN 4 FELINE SARCOMA VIRAL ONCOGENE HOMOLOG)	81272, 81273
KRAS (KIRSTEN RAT SARCOMA VIRAL ONCOGENE HOMOLOG)	81275, 81276
MEN1 (multiple endocrine neoplasia 1)	81404
MET (mesenchymal epithelial transition factor receptor)	81479
MGMT (O-6-methylguanine-DNA methyltransferase)	81287
MPL (myeloproliferative leukemia virus oncogene, thrombopoietin receptor, TPOR)	81338, 81339
Microsatellite instability analysis	81301
MYD88 (MYELOID DIFFERENTIATION PRIMARY RESPONSE 88)	81305
NPM1 (nucleophosmin)	81310
NRAS (neuroblastoma RAS viral [v-ras] oncogene homolog)	81311

Test	Code(s)
Oncology (breast), mRNA	81518, 81519, 81520, 81522, 81523
PDGFRA (platelet-derived growth factor receptor, alpha polypeptide)	81314
PML/RARALPHA (PROMYELOCYTIC LEUKEMIA/RETINOIC ACID RECEPTOR ALPHA)	81315, 81316
Prosigna® Breast Cancer Prognostic Gene Signature Assay	81520
RARS (SF3B1 mutation)	81347
RET (ret-proto-oncogene)	81406
ROS (reactive oxygen species)	81479
SERPINA1 (serpin peptidase inhibitor, clade A, alpha-1-antiproteinase, antitrypsin, member 1)	81332
TP53 (tumor protein 53)	81351, 81352, 81353, 81405
TRB@ (T CELL antigen receptor, BETA)	81340, 81341
TRG@ (T CELL antigen receptor, GAMMA)	81342

For Warfarin Response using Genetic Test VKORC1 (CPT code 81355) and CYP2C9 (CPT code 81227), use NCD 90.1 for coverage criteria.

Code	Description
81227	CYP2C9 (cytochrome P450, family 2, subfamily C, polypeptide 9) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3, *5, *6)
81355	VKORC1 (vitamin K epoxide reductase complex, subunit 1) (eg, warfarin metabolism), gene analysis, common variant(s) (eg, -1639G>A, c.173+1000C>T)

For Targeted genomic sequence analysis panel, solid organ transplantation use LCD L37810 article A56867 and for coverage criteria.

Code	Description
81445	SOLID ORGAN NEOPLASM, GENOMIC SEQUENCE ANALYSIS PANEL, 5-50 GENES, INTERROGATION FOR SEQUENCE VARIANTS AND COPY NUMBER VARIANTS OR REARRANGEMENTS, IF PERFORMED; DNA ANALYSIS OR COMBINED DNA AND RNA ANALYSIS
81449	SOLID ORGAN NEOPLASM, GENOMIC SEQUENCE ANALYSIS PANEL, 5-50 GENES, INTERROGATION FOR SEQUENCE VARIANTS AND COPY NUMBER VARIANTS OR REARRANGEMENTS, IF PERFORMED; RNA ANALYSIS
81455	SOLID ORGAN OR HEMATOLYMPHOID NEOPLASM OR DISORDER, 51 OR GREATER GENES, GENOMIC SEQUENCE ANALYSIS PANEL, INTERROGATION FOR SEQUENCE VARIANTS AND COPY NUMBER VARIANTS OR REARRANGEMENTS, OR ISOFORM EXPRESSION OR MRNA EXPRESSION LEVELS, IF PERFORMED; DNA ANALYSIS OR COMBINED DNA AND RNA ANALYSIS
81456	SOLID ORGAN OR HEMATOLYMPHOID NEOPLASM OR DISORDER, 51 OR GREATER GENES, GENOMIC SEQUENCE ANALYSIS PANEL, INTERROGATION FOR SEQUENCE VARIANTS AND COPY NUMBER VARIANTS OR REARRANGEMENTS, OR ISOFORM EXPRESSION OR MRNA EXPRESSION LEVELS, IF PERFORMED; RNA ANALYSIS
81457	SOLID ORGAN NEOPLASM, GENOMIC SEQUENCE ANALYSIS PANEL, INTERROGATION FOR SEQUENCE VARIANTS; DNA ANALYSIS, MICROSATELLITE INSTABILITY
81458	SOLID ORGAN NEOPLASM, GENOMIC SEQUENCE ANALYSIS PANEL, INTERROGATION FOR SEQUENCE VARIANTS; DNA ANALYSIS, COPY NUMBER VARIANTS AND MICROSATELLITE INSTABILITY
81459	SOLID ORGAN NEOPLASM, GENOMIC SEQUENCE ANALYSIS PANEL, INTERROGATION FOR SEQUENCE VARIANTS; DNA ANALYSIS OR COMBINED DNA AND RNA ANALYSIS, COPY NUMBER VARIANTS, MICROSATELLITE INSTABILITY, TUMOR MUTATION BURDEN, AND REARRANGEMENTS
81462	SOLID ORGAN NEOPLASM, GENOMIC SEQUENCE ANALYSIS PANEL, CELL-FREE NUCLEIC ACID (EG, PLASMA), INTERROGATION FOR SEQUENCE VARIANTS; DNA ANALYSIS OR COMBINED DNA AND RNA ANALYSIS, COPY NUMBER VARIANTS AND REARRANGEMENTS
81463	SOLID ORGAN NEOPLASM, GENOMIC SEQUENCE ANALYSIS PANEL, CELL-FREE NUCLEIC ACID (EG, PLASMA), INTERROGATION FOR SEQUENCE VARIANTS; DNA ANALYSIS, COPY NUMBER VARIANTS, AND MICROSATELLITE INSTABILITY

Code	Description
81464	SOLID ORGAN NEOPLASM, GENOMIC SEQUENCE ANALYSIS PANEL, CELL-FREE NUCLEIC ACID (EG, PLASMA), INTERROGATION FOR SEQUENCE VARIANTS; DNA ANALYSIS OR COMBINED DNA AND RNA ANALYSIS, COPY NUMBER VARIANTS, MICROSATELLITE INSTABILITY, TUMOR MUTATION BURDEN, AND REARRANGEMENTS
0048U	ONCOLOGY (SOLID ORGAN NEOPLASIA), DNA, TARGETED SEQUENCING OF PROTEIN-CODING EXONS OF 468 CANCER-ASSOCIATED GENES, INCLUDING INTERROGATION FOR SOMATIC MUTATIONS AND MICROSATELLITE INSTABILITY, MATCHED WITH NORMAL SPECIMENS, UTILIZING FORMALIN-FIXED PARAFFIN-EMBEDDED TUMOR TISSUE, REPORT OF CLINICALLY SIGNIFICANT MUTATION(S)
0250U	ONCOLOGY (SOLID ORGAN NEOPLASM), TARGETED GENOMIC SEQUENCE DNA ANALYSIS OF 505 GENES, INTERROGATION FOR SOMATIC ALTERATIONS (SNVS [SINGLE NUCLEOTIDE VARIANT], SMALL INSERTIONS AND DELETIONS, ONE AMPLIFICATION, AND FOUR TRANSLOCATIONS), MICROSATELLITE INSTABILITY AND TUMOR-MUTATION BURDEN
0326U	TARGETED GENOMIC SEQUENCE ANALYSIS PANEL, SOLID ORGAN NEOPLASM, CELL-FREE CIRCULATING DNA ANALYSIS OF 83 OR MORE GENES, INTERROGATION FOR SEQUENCE VARIANTS, GENE COPY NUMBER AMPLIFICATIONS, GENE REARRANGEMENTS, MICROSATELLITE INSTABILITY AND TUMOR MUTATIONAL BURDEN
0334U	ONCOLOGY (SOLID ORGAN), TARGETED GENOMIC SEQUENCE ANALYSIS, FORMALIN-FIXED PARAFFINEMBEDDED (FFPE) TUMOR TISSUE, DNA ANALYSIS, 84 OR MORE GENES, INTERROGATION FOR SEQUENCE VARIANTS, GENE COPY NUMBER AMPLIFICATIONS, GENE REARRANGEMENTS, MICROSATELLITE INSTABILITY AND TUMOR MUTATIONAL BURDEN
0473U	ONCOLOGY (SOLID TUMOR), NEXT-GENERATION SEQUENCING (NGS) OF DNA FROM FORMALIN-FIXED PARAFFIN-EMBEDDED (FFPE) TISSUE WITH COMPARATIVE SEQUENCE ANALYSIS FROM A MATCHED NORMAL SPECIMEN (BLOOD OR SALIVA), 648 GENES, INTERROGATION FOR SEQUENCE VARIANTS, INSERTION AND DELETION ALTERATIONS, COPY NUMBER VARIANTS, REARRANGEMENTS, MICROSATELLITE INSTABILITY, AND TUMOR-MUTATION BURDEN

Note: Medicare has limited coverage on specific genes reported, see LCD for specific list.

The Plan has additional genetics tests that require prior authorization. Please see the Tufts Medicare Preferred Prior Authorization, Notification, and no Prior Authorization list for a complete list.

Limitations

The Plan will not cover genetic testing for any of the following:

- Any procedures required prior to cell lysis should be reported separately and utilization must be clearly supported based on the application and clinical utility. Such claims may be subject to prepayment medical review.
- The medically necessary interpretation and report of a molecular pathology test, written by a pathologist, which is above and beyond the report of standard laboratory results may not be reported by Non- physician practitioners (e.g., PhD, scientists etc.); only physicians are eligible to report this service.
- Testing for quality assurance component of the service is not separately billable.

Medicare considers certain genetic tests/ gene combinations as not medically necessary. Please reference the LCD/LCA for a full list of the not medically necessary tests.

Codes

The following code(s) require prior authorization:

Table 1: CPT/HCPCS Codes

See codes above for each test. The code descriptions can be found in the Local Coverage Article (LCA).

References:

1. Centers for Medicare & Medicaid Services. Local Coverage Determination (LCD) L35000 Molecular Pathology Procedures. Accessed September 1, 2025. LCD - Molecular Pathology Procedures (L35000) (cms.gov)
2. Centers for Medicare and Medicaid Services. Local Coverage Determinations associated article (LCA) A56199

Billing and Coding: Molecular Pathology Procedures. Accessed September 1, 2025. Article - Billing and Coding: Molecular Pathology Procedures (A56199) (cms.gov)

3. Centers for Medicare & Medicaid Services. Local Coverage Determination (LCD) L37810 Genomic Sequence Analysis Panels in the Treatment of Solid Organ Neoplasms. Accessed September 1, 2025. LCD - Genomic Sequence Analysis Panels in the Treatment of Solid Organ Neoplasms (L37810) (cms.gov)
4. Centers for Medicare and Medicaid Services. Local Coverage Determinations associated article (LCA) A56867 Billing and Coding: Genomic Sequence Analysis Panels in the Treatment of Solid Organ Neoplasm. Accessed September 1, 2025. Article - Billing and Coding: Genomic Sequence Analysis Panels in the Treatment of Solid Organ Neoplasms (A56867) (cms.gov)
5. Centers for Medicare & Medicaid Services. National Coverage Determinations (NCD) 90.1 Pharmacogenomic Testing for Warfarin Response. Accessed September 1, 2025. NCD - Pharmacogenomic Testing for Warfarin Response (90.1) (cms.gov)

Approval And Revision History

September 19, 2024: Service reviewed and approved by the Joint Medical Policy and Health Care Services Utilization Management Committee effective January 1, 2025

Subsequent Endorsement Dates and Changes Made:

- October 17, 2024: Reviewed by the Medical Policy Approval Committee (MPAC) effective January 1, 2025
- September 17, 2025. Reviewed by MPAC, annual review no changes, effective November 1, 2025
- October 21, 2026. Reviewed by MPAC, annual review no changes. Effective date November 4, 2026. Administrative update, template updated.

Background, Product and Disclaimer Information

Medical Necessity Guidelines are developed to determine coverage for benefits and are published to provide a better understanding of the basis upon which coverage decisions are made. We make coverage decisions using these guidelines, along with the Member's benefit document, and in coordination with the Member's physician(s) on a case-by-case basis considering the individual Member's health care needs.

Medical Necessity Guidelines are developed for selected therapeutic or diagnostic services found to be safe and proven effective in a limited, defined population of patients or clinical circumstances. They include concise clinical coverage criteria based on current literature review, consultation with practicing physicians in our service area who are medical experts in the particular field, FDA and other government agency policies, and standards adopted by national accreditation organizations. We revise and update Medical Necessity Guidelines annually, or more frequently if new evidence becomes available that suggests needed revisions.

For self-insured plans, coverage may vary depending on the terms of the benefit document. If a discrepancy exists between a Medical Necessity Guideline and a self-insured Member's benefit document, the provisions of the benefit document will govern. For Tufts Health Together (Medicaid), coverage may be available beyond these guidelines for pediatric members under age 21 under the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefits of the plan in accordance with 130 CMR 450.140 and 130 CMR 447.000, and with prior authorization.

Treating providers are solely responsible for the medical advice and treatment of Members. The use of this guideline is not a guarantee of payment or a final prediction of how specific claim(s) will be adjudicated. Claims payment is subject to eligibility and benefits on the date of service, coordination of benefits, referral/authorization, utilization management guidelines when applicable, and adherence to plan policies, plan procedures, and claims editing logic.