3 Independence Way, Suite 104 Princeton, NJ 08540



Dear Provider,

On October 1, 2024, the following Aetna Better Health of New Jersey Medicaid Health Plan Policies will be implemented:

## Genetic Codes:

• The following codes will deny if billed more than one (1) unit per date of service (DOS).

| Code  | Policy  |
|-------|---|
| 81324 | RUNX1 (runt related transcription factor 1) (eg, acute myeloid leukemia,            |
|       | familial platelet disorder with associated myeloid malignancy), gene analysis,      |
|       | targeted sequence analysis (eg, exons 3-8)  |
| 81238 | EZH2 (enhancer of zeste 2 polycomb repressive complex 2 subunit) (eg,               |
|       | myelodysplastic syndrome, myeloproliferative neoplasms) gene analysis, full         |
|       | gene sequence   |
| 81370 | HLA Class I and II typing, low resolution (eg, antigen equivalents); HLA-A, -B, -   |
|       | C, -DRB1/3/4/5, and -DQB1   |
| 81371 | HLA Class I and II typing, low resolution (eg, antigen equivalents); HLA-A, -B,     |
|       | and -DRB1 (eg, verification typing)   |
| 81372 | HLA Class I typing, low resolution (eg, antigen equivalents); complete (ie,         |
|       | HLA-A, -B, and -C)  |
| 81374 | HLA Class I typing, low resolution (eg, antigen equivalents); one antigen           |
|       | equivalent (eg, B*27), each   |
| 81375 | HLA Class II typing, low resolution (eg, antigen equivalents); HLA-DRB1/3/4/5       |
|       | and -DQB1   |
| 81378 | HLA Class I and II typing, high resolution (ie, alleles or allele groups), HLA-A, - |
|       | B, -C, and -DRB1  |
| 81379 | HLA Class I typing, high resolution (ie, alleles or allele groups); complete (ie,   |
|       | HLA-A, -B, and -C)  |
| 81401 | MOLECULAR PATHOLOGY PROCEDURE LEVEL 2   |
| 81402 | MOLECULAR PATHOLOGY PROCEDURE LEVEL 3   |
| 81407 | MOLECULAR PATHOLOGY PROCEDURE LEVEL 7   |
| 81596 | Infectious disease, chronic hepatitis C virus (HCV) infection, six biochemical      |
|       | assays (ALT, A2-macroglobulin, apolipoprotein A-1, total bilirubin, GGT, and        |
|       | haptoglobin) utilizing serum, prognostic algorithm reported as scores for           |
|       | fibrosis and necro inflammatory activity in liver                                   |
| 81120 | IDH1 (isocitrate dehydrogenase 1 [NADP+], soluble) (eg, glioma), common             |
|       | variants (eg, R132H, R132C)   |
| 81121 | DH2 (isocitrate dehydrogenase 2 [NADP+], mitochondrial) (eg, glioma),               |
|       | common variants (eg, R140W, R172M)  |
| 81168 | CCND1/IGH (t(11;14)) (eg, mantle cell lymphoma) translocation analysis,             |
|       | major breakpoint, qualitative and quantitative, if performed                        |
| 81170 | ABL1 (ABL proto-oncogene 1, non-receptor tyrosine kinase) (eg, acquired             |
|       | imatinib tyrosine kinase inhibitor resistance), gene analysis, variants in the      |

|       | kinase domain   |
|-------|---|
| 81175 | ASXL1 (additional sex combs like 1, transcriptional regulator) (eg,           |
|       | myelodysplastic syndrome, myeloproliferative neoplasms, chronic               |
|       | myelomonocytic leukemia), gene analysis; full gene sequence                   |
| 81176 | ASXL1 (additional sex combs like 1, transcriptional regulator) (eg,           |
|       | myelodysplastic syndrome, myeloproliferative neoplasms, chronic               |
|       | myelomonocytic leukemia), gene analysis; targeted sequence analysis (eg,      |
|       | exon 12)  |
| 81206 | BCR/ABL1 (t(9;22)) (eg, chronic myelogenous leukemia) translocation           |
|       | analysis; major breakpoint, qualitative or quantitative                       |
| 81207 | BCR/ABL1 (t(9;22)) (eg, chronic myelogenous leukemia) translocation           |
|       | analysis; minor breakpoint, qualitative or quantitative                       |
| 81208 | BCR/ABL1 (t(9;22)) (eg, chronic myelogenous leukemia) translocation           |
|       | analysis; other breakpoint, qualitative or quantitative                       |
| 81210 | BRAF (B-Raf proto-oncogene, serine/threonine kinase) (eg, colon cancer,       |
|       | melanoma), gene analysis, V600 variant(s)                                     |
| 81218 | CEBPA (CCAAT/enhancer binding protein [C/EBP], alpha) (eg, acute myeloid      |
|       | leukemia), gene analysis, full gene sequence                                  |
| 81219 | CALR (calreticulin) (eg, myeloproliferative disorders), gene analysis, common |
|       | variants in exon 9  |
| 81233 | BTK (Bruton's tyrosine kinase) (eg, chronic lymphocytic leukemia) gene        |
|       | analysis, common variants (eg, C481S, C481R, C481F)                           |
| 81235 | EGFR (epidermal growth factor receptor) (eg, non-small cell lung cancer) gene |
|       | analysis, common variants (eg, exon 19 LREA deletion, L858R, T790M, G719A,    |
|       | G719S, L861Q)   |
| 81236 | EZH2 (enhancer of zeste 2 polycomb repressive complex 2 subunit) (eg,         |
|       | myelodysplastic syndrome, myeloproliferative neoplasms) gene analysis, full   |
|       | gene sequence   |
| 81237 | EZH2 (enhancer of zeste 2 polycomb repressive complex 2 subunit) (eg,         |
|       | diffuse large B-cell lymphoma) gene analysis, common variant(s) (eg, codon    |
|       | 646)  |
| 81245 | FLT3 (fms-related tyrosine kinase 3) (eg, acute myeloid leukemia), gene       |
|       | analysis; internal tandem duplication (ITD) variants (ie, exons 14, 15)       |
| 81246 | FLT3 (fms-related tyrosine kinase 3) (eg, acute myeloid leukemia), gene       |
|       | analysis; tyrosine kinase domain (TKD) variants (eg, D835, I836)              |
| 81261 | IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas, B-      |
|       | cell), gene rearrangement analysis to detect abnormal clonal population(s);   |
|       | amplified methodology (eg, polymerase chain reaction)                         |
| 81262 | IGH@ (Immunoglobulin heavy chain locus) (eg, leukemias and lymphomas, B-      |
|       | cell), gene rearrangement analysis to detect abnormal clonal population(s);   |
| 04262 | direct probe methodology (eg, Southern blot)                                  |
| 81263 | IGH@ (Immunoglobulin heavy chain locus) (eg, leukemia and lymphoma, B-        |
| 01265 | cell), variable region somatic mutation analysis                              |
| 81264 | IGK@ (Immunoglobulin kappa light chain locus) (eg, leukemia and lymphoma,     |
|       | B-cell), gene rearrangement analysis, evaluation to detect abnormal clonal    |
| 01265 | population(s)   |
| 81265 | Comparative analysis using Short Tandem Repeat (STR) markers; patient and     |

|       | comparative encoimen (or are transplant reginient and depar cormline          |
|-------|---|
|       | comparative specimen (eg, pre-transplant recipient and donor germline         |
|       | testing, post-transplant non-hematopoietic recipient germline [eg, buccal     |
|       | swab or other germline tissue sample] and donor testing, twin zygosity        |
|       | testing, or maternal cell contamination of fetal cells)                       |
| 81267 | Chimerism (engraftment) analysis, post transplantation specimen (eg,          |
|       | hematopoietic stem cell), includes comparison to previously performed         |
|       | baseline analyses; without cell selection                                     |
| 81268 | Chimerism (engraftment) analysis, post transplantation specimen (eg,          |
|       | hematopoietic stem cell), includes comparison to previously performed         |
|       | baseline analyses; with cell selection (eg, CD3, CD33), each cell type        |
| 81270 | JAK2 (Janus kinase 2) (eg, myeloproliferative disorder) gene analysis,        |
|       | p.Val617Phe (V617F) variant   |
| 81272 | KIT (v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog) (eg,      |
|       | gastrointestinal stromal tumor [GIST], acute myeloid leukemia, melanoma),     |
|       | gene analysis, targeted sequence analysis (eg, exons 8, 11, 13, 17, 18)       |
| 81273 | KIT (v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog) (eg,      |
| 0/0   | mastocytosis), gene analysis, D816 variant(s)                                 |
| 81275 | KRAS (Kirsten rat sarcoma viral oncogene homolog) (eg, carcinoma) gene        |
| 012/5 | analysis; variants in exon 2 (eg, codons 12 and 13)                           |
| 81276 | KRAS (Kirsten rat sarcoma viral oncogene homolog) (eg, carcinoma) gene        |
| 81270 | analysis; additional variant(s) (eg, codon 61, codon 146)                     |
| 01070 |   |
| 81278 | IGH@/BCL2 (t(14;18)) (eg, follicular lymphoma) translocation analysis, major  |
|       | breakpoint region (MBR) and minor cluster region (mcr) breakpoints,           |
| 01070 | qualitative or quantitative   |
| 81279 | JAK2 (Janus kinase 2) (eg, myeloproliferative disorder) targeted sequence     |
| 04007 | analysis (eg, exons 12 and 13)  |
| 81287 | MGMT (O-6-methylguanine-DNA methyltransferase) (eg, glioblastoma              |
|       | multiforme) promoter methylation analysis                                     |
| 81305 | MYD88 (myeloid differentiation primary response 88) (eg, Waldenstrom's        |
|       | macroglobulinemia, lymphoplasmacytic leukemia) gene analysis, p.Leu265Pro     |
|       | (L265P) variant   |
| 81309 | PIK3CA (phosphatidylinositol-4, 5-biphosphate 3-kinase, catalytic subunit     |
|       | alpha) (eg, colorectal and breast cancer) gene analysis, targeted sequence    |
|       | analysis (eg, exons 7, 9, 20)   |
| 81310 | NPM1 (nucleophosmin) (eg, acute myeloid leukemia) gene analysis, exon 12      |
|       | variants  |
| 81311 | NRAS (neuroblastoma RAS viral [v-ras] oncogene homolog) (eg, colorectal       |
|       | carcinoma), gene analysis, variants in exon 2 (eg, codons 12 and 13) and exon |
|       | 3 (eg, codon 61)  |
| 81313 | PCA3/KLK3 (prostate cancer antigen 3 [non-protein coding]/kallikrein-related  |
|       | peptidase 3 [prostate specific antigen]) ratio (eg, prostate cancer)          |
| 81315 | PML/RARalpha, (t(15;17)), (promyelocytic leukemia/retinoic acid receptor      |
| -     | alpha) (eg, promyelocytic leukemia) translocation analysis; common            |
|       | breakpoints (eg, intron 3 and intron 6), qualitative or quantitative          |
| 81316 | PML/RARalpha, (t(15;17)), (promyelocytic leukemia/retinoic acid receptor      |
| 01010 | alpha) (eg, promyelocytic leukemia) translocation analysis; single breakpoint |
|       | (eg, intron 3, intron 6 or exon 6), qualitative or quantitative               |
|       |   |

| 81320 | PLCG2 (phospholipase C gamma 2) (eg, chronic lymphocytic leukemia) gene   |
|-------|---|
|       | analysis, common variants (eg, R665W, S707F, L845F)   |
| 81334 | RUNX1 (runt related transcription factor 1) (eg, acute myeloid leukemia,  |
|       | familial platelet disorder with associated myeloid malignancy), gene analysis,  |
|       | targeted sequence analysis (eg, exons 3-8)  |
| 81338 | MPL (MPL proto-oncogene, thrombopoietin receptor) (eg, myeloproliferative disorder) gene analysis; common variants (eg, W515A, W515K, W515L, W515R) |
| 81339 | MPL (MPL proto-oncogene, thrombopoietin receptor) (eg, myeloproliferative   |
| 81333 | disorder) gene analysis; sequence analysis, exon 10   |
| 81340 | TRB@ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene  |
|       | rearrangement analysis to detect abnormal clonal population(s); using   |
|       | amplification methodology (eg, polymerase chain reaction)   |
| 81341 | TRB@ (T cell antigen receptor, beta) (eg, leukemia and lymphoma), gene  |
|       | rearrangement analysis to detect abnormal clonal population(s); using direct  |
|       | probe methodology (eg, Southern blot)   |
| 81342 | TRG@ (T cell antigen receptor, gamma) (eg, leukemia and lymphoma), gene   |
|       | rearrangement analysis, evaluation to detect abnormal clonal population(s)  |
| 81345 | TERT (telomerase reverse transcriptase) (eg, thyroid carcinoma, glioblastoma  |
|       | multiforme) gene analysis, targeted sequence analysis (eg, promoter region)   |
| 81347 | SF3B1 (splicing factor [3b] subunit B1) (eg, myelodysplastic syndrome/acute   |
|       | myeloid leukemia) gene analysis, common variants (eg, A672T, E622D, L833F, R625C, R625L)  |
| 81348 | SRSF2 (serine and arginine-rich splicing factor 2) (eg, myelodysplastic   |
|       | syndrome, acute myeloid leukemia) gene analysis, common variants (eg, P95H, P95L)   |
| 81357 | U2AF1 (U2 small nuclear RNA auxiliary factor 1) (eg, myelodysplastic  |
|       | syndrome, acute myeloid leukemia) gene analysis, common variants (eg,   |
|       | S34F, S34Y, Q157R, Q157P)   |
| 81360 | ZRSR2 (zinc finger CCCH-type, RNA binding motif and serine/arginine-rich 2)   |
|       | (eg, myelodysplastic syndrome, acute myeloid leukemia) gene analysis,   |
|       | common variant(s) (eg, E65fs, E122fs, R448fs)   |
| 81417 | Exome (eg, unexplained constitutional or heritable disorder or syndrome); re-   |
|       | evaluation of previously obtained exome sequence (eg, updated knowledge   |
|       | or unrelated condition/syndrome)  |
| 81427 | Genome (eg, unexplained constitutional or heritable disorder or syndrome);  |
|       | re-evaluation of previously obtained genome sequence (eg, updated   |
|       | knowledge or unrelated condition/syndrome)  |
| 81479 | Unlisted molecular pathology procedure  |
| 81504 | Oncology (tissue of origin), microarray gene expression profiling of > 2000   |
|       | genes, utilizing formalin-fixed paraffin-embedded tissue, algorithm reported  |
|       | as tissue similarity scores   |
| 81513 | Infectious disease, bacterial vaginosis, quantitative real-time amplification of  |
|       | RNA markers for Atopobium vaginae, Gardnerella vaginalis, and Lactobacillus   |
|       | species, utilizing vaginal-fluid specimens, algorithm reported as a positive or   |
|       | negative result for bacterial vaginosis   |
| 81514 | Infectious disease, bacterial vaginosis and vaginitis, quantitative real-time   |

| 81518 | <ul> <li>amplification of DNA markers for Gardnerella vaginalis, Atopobium vaginae,<br/>Megasphaera type 1, Bacterial Vaginosis Associated Bacteria-2 (BVAB-2), and<br/>Lactobacillus species (L. crispatus and L. jensenii), utilizing vaginal-fluid<br/>specimens, algorithm reported as a positive or negative for high likelihood of<br/>bacterial vaginosis, includes separate detection of Trichomonas vaginalis<br/>and/or Candida species (C. albicans, C. tropicalis, C. parapsilosis, C.<br/>dubliniensis), Candida glabrata, Candida krusei, when reported</li> <li>Oncology (breast), mRNA, gene expression profiling by real-time RT-PCR of 11</li> </ul> |
|-------|--|
|       | genes (7 content and 4 housekeeping), utilizing formalin-fixed paraffin-<br>embedded tissue, algorithms reported as percentage risk for metastatic<br>recurrence and likelihood of benefit from extended endocrine therapy   |
| 81535 | Oncology (gynecologic), live tumor cell culture and chemotherapeutic response by DAPI stain and morphology, predictive algorithm reported as a drug response score; first single drug or drug combination  |
| 81538 | Oncology (lung), mass spectrometric 8-protein signature, including amyloid A, utilizing serum, prognostic and predictive algorithm reported as good versus poor overall survival   |
| 81539 | Oncology (high-grade prostate cancer), biochemical assay of four proteins<br>(Total PSA, Free PSA, Intact PSA, and human kallikrein-2 [hK2]), utilizing<br>plasma or serum, prognostic algorithm reported as a probability score   |
| 81540 | Oncology (tumor of unknown origin), mRNA, gene expression profiling by<br>real-time RT-PCR of 92 genes (87 content and 5 housekeeping) to classify<br>tumor into main cancer type and subtype, utilizing formalin-fixed paraffin-<br>embedded tissue, algorithm reported as a probability of a predicted main<br>cancer type and subtype   |
| 81551 | Oncology (prostate), promoter methylation profiling by real-time PCR of 3 genes (GSTP1, APC, RASSF1), utilizing formalin-fixed paraffin-embedded tissue, algorithm reported as a likelihood of prostate cancer detection on repeat biopsy  |
| 81554 | Pulmonary disease (idiopathic pulmonary fibrosis [IPF]), mRNA, gene<br>expression analysis of 190 genes, utilizing transbronchial biopsies, diagnostic<br>algorithm reported as categorical result (eg, positive or negative for high<br>probability of usual interstitial pneumonia [UIP])  |
| 81595 | Cardiology (heart transplant), mRNA, gene expression profiling by real-time quantitative PCR of 20 genes (11 content and 9 housekeeping), utilizing subfraction of peripheral blood, algorithm reported as a rejection risk score  |

• The following codes will deny if billed more than two (2) units per date of service (DOS).

| Code  | Policy   |
|-------|--|
| 81373 | HLA Class I typing, low resolution (eg, antigen equivalents); one locus (eg,       |
|       | HLA-A, -B, or -C), each  |
| 81377 | HLA Class II typing, low resolution (eg, antigen equivalents); one antigen         |
|       | equivalent, each   |
| 81380 | HLA Class I typing, high resolution (ie, alleles or allele groups); one locus (eg, |

|       | HLA-A, -B, or -C), each   |
|-------|---|
| 81383 | HLA Class II typing, high resolution (ie, alleles or allele groups); one allele or  |
|       | allele group (eg, HLA-DQB1*06:02P), each  |
| 81546 | Oncology (thyroid), mRNA, gene expression analysis of 10,196 genes, utilizing fine needle aspirate, algorithm reported as a categorical result (eg, benign or |
|       | suspicious)   |

• The following codes will deny if billed more than three (3) units per date of service (DOS).

| Code  | Policy  |
|-------|---|
| 81381 | HLA Class I typing, high resolution (ie, alleles or allele groups); one allele or |
|       | allele group (eg, B*57:01P), each   |

## Genetic Codes:

• The following codes will deny if billed more than five (5) units per date of service (DOS).

| Code  | Policy  |
|-------|---|
| 81376 | HLA Class II typing, low resolution (eg, antigen equivalents); one locus (eg, |
|       | HLA-DRB1, -DRB3/4/5, -DQB1, -DQA1, -DPB1, or -DPA1), each                     |

### Genetic Codes:

The following codes will deny if billed more than six (6) units per date of service (DOS).

| Code  | Policy  |
|-------|---|
| 81382 | HLA Class II typing, high resolution (ie, alleles or allele groups); one locus (eg, |
|       | HLA-DRB1, -DRB3/4/5, -DQB1, -DQA1, -DPB1, or -DPA1), each                           |

#### **Genetic Codes:**

• The following codes will deny if billed more than one (1) unit per 240 days.

| Code  | Policy   |
|-------|--|
| 81420 | Fetal chromosomal aneuploidy (eg, trisomy 21, monosomy X) genomic            |
|       | sequence analysis panel, circulating cell-free fetal DNA in maternal blood,  |
|       | must include analysis of chromosomes 13, 18, and 21                          |
| 81422 | Fetal chromosomal microdeletion(s) genomic sequence analysis (eg, DiGeorge   |
|       | syndrome, Cri-du-chat syndrome), circulating cell-free fetal DNA in maternal |
|       | blood  |
| 81507 | Fetal aneuploidy (trisomy 21, 18, and 13) DNA sequence analysis of selected  |
|       | regions using maternal plasma, algorithm reported as a risk score for each   |
|       | trisomy  |

| 81508 | Fetal congenital abnormalities, biochemical assays of two proteins (PAPP-A, hCG [any form]), utilizing maternal serum, algorithm reported as a risk score        |
|-------|--|
| 81509 | Fetal congenital abnormalities, biochemical assays of three proteins (PAPP-A, hCG [any form], DIA), utilizing maternal serum, algorithm reported as a risk score |

• The following codes will deny if billed more than one (1) unit per 270 days.

| Code  | Policy  |
|-------|---|
| 81510 | Fetal congenital abnormalities, biochemical assays of three analytes (AFP, uE3, hCG [any form]), utilizing maternal serum, algorithm reported as a risk score   |
| 81511 | Fetal congenital abnormalities, biochemical assays of four analytes (AFP, uE3, hCG [any form], DIA) utilizing maternal serum, algorithm reported as a risk score (may include additional results from previous biochemical testing) |
| 81512 | Fetal congenital abnormalities, biochemical assays of five analytes (AFP, uE3, total hCG, hyperglycosylated hCG, DIA) utilizing maternal serum, algorithm reported as a risk score  |

### Genetic Codes:

• The following codes will deny if billed more than one (1) unit per 330 days.

| Code  | Policy  |
|-------|---|
| 81528 | Oncology (colorectal) screening, quantitative real-time target, and signal<br>amplification of 10 DNA markers (KRAS mutations, promoter methylation of<br>NDRG4 and BMP3) and fecal hemoglobin, utilizing stool, algorithm reported<br>as a positive or negative result |

### **Genetic Codes:**

• The following codes will deny if billed more than one (1) unit per 365 days.

| Code  | Policy  |
|-------|---|
| 81506 | Endocrinology (type 2 diabetes), biochemical assays of seven analytes<br>(glucose, HbA1c, insulin, hs-CRP, adiponectin, ferritin, interleukin 2-receptor<br>alpha), utilizing serum or plasma, algorithm reporting a risk score |

## **Genetic Codes:**

• The following codes will deny if billed more than two (2) units per 365 days.

| Code  | Policy   |
|-------|--|
| 81490 | Autoimmune (rheumatoid arthritis), analysis of 12 biomarkers using |

|       | immunoassays, utilizing serum, prognostic algorithm reported as a disease activity score   |
|-------|--|
| 81493 | Coronary artery disease, mRNA, gene expression profiling by real-time RT-PCR of 23 genes, utilizing whole peripheral blood, algorithm reported as a risk score |

• The following codes will deny if billed more than three (3) units per 365 days.

| Code  | Policy   |
|-------|--|
| 81536 | Oncology (gynecologic), live tumor cell culture and chemotherapeutic<br>response by DAPI stain and morphology, predictive algorithm reported as a<br>drug response score; each additional single drug or drug combination (List<br>separately in addition to code for primary procedure) |

## **Genetic Codes:**

• The following codes will deny if billed more than one (1) unit per 730 days.

| Code  | Policy   |
|-------|--|
| 81500 | Oncology (ovarian), biochemical assays of two proteins (CA-125 and HE4), utilizing serum, with menopausal status, algorithm reported as a risk score   |
| 81503 | Oncology (ovarian), biochemical assays of five proteins (CA-125,<br>apolipoprotein A1, beta-2 microglobulin, transferrin, and pre-albumin),<br>utilizing serum, algorithm reported as a risk score |

## **Genetic Codes:**

• The following codes will deny if billed more than one (1) unit per 1095 days.

| Code  | Policy   |
|-------|--|
| 81161 | DMD (dystrophin) (eg, Duchenne/Becker muscular dystrophy) deletion         |
|       | analysis, and duplication analysis, if performed                           |
| 81205 | BCKDHB (branched-chain keto acid dehydrogenase E1, beta polypeptide) (eg,  |
|       | maple syrup urine disease) gene analysis, common variants (eg, R183P,      |
|       | G278S, E422X)  |
| 81209 | BLM (Bloom syndrome, RecQ helicase-like) (eg, Bloom syndrome) gene         |
|       | analysis, 2281del6ins7 variant   |
| 81220 | CFTR (cystic fibrosis transmembrane conductance regulator) (eg, cystic     |
|       | fibrosis) gene analysis; common variants (eg, ACMG/ACOG guidelines)        |
| 81222 | CFTR (cystic fibrosis transmembrane conductance regulator) (eg, cystic     |
|       | fibrosis) gene analysis; duplication/deletion variants                     |
| 81223 | CFTR (cystic fibrosis transmembrane conductance regulator) (eg, cystic     |
|       | fibrosis) gene analysis; full gene sequence                                |
| 81225 | CYP2C19 (cytochrome P450, family 2, subfamily C, polypeptide 19) (eg, drug |

|       | metabolism), gene analysis, common variants (eg, *2, *3, *4, *8, *17)   |
|-------|---|
| 81226 | CYP2D6 (cytochrome P450, family 2, subfamily D, polypeptide 6) (eg, drug  |
|       | metabolism), gene analysis, common variants (eg, *2, *3, *4, *5, *6, *9, *10, *17, *19, *29, *35, *41, *1XN, *2XN, *4XN)              |
| 81227 | CYP2C9 (cytochrome P450, family 2, subfamily C, polypeptide 9) (eg, drug  |
|       | metabolism), gene analysis, common variants (eg, *2, *3, *5, *6)  |
| 81228 | Cytogenomic (genome-wide) analysis for constitutional chromosomal   |
|       | abnormalities; interrogation of genomic regions for copy number variants, comparative genomic hybridization [CGH] microarray analysis |
| 81229 | Cytogenomic (genome-wide) analysis for constitutional chromosomal   |
| 01220 | abnormalities; interrogation of genomic regions for copy number and single  |
|       | nucleotide polymorphism (SNP) variants, comparative genomic hybridization   |
|       | (CGH) microarray analysis   |
| 81240 | F2 (prothrombin, coagulation factor II) (eg, hereditary hypercoagulability)   |
|       | gene analysis, 20210G>A variant   |
| 81241 | F5 (coagulation factor V) (eg, hereditary hypercoagulability) gene analysis,  |
|       | Leiden variant  |
| 81242 | FANCC (Fanconi anemia, complementation group C) (eg, Fanconi anemia,  |
|       | type C) gene analysis, common variant (eg, IVS4+4A>T)   |
| 81243 | FMR1 (fragile X mental retardation 1) (eg, fragile X mental retardation) gene   |
| 04050 | analysis; evaluation to detect abnormal (eg, expanded) alleles  |
| 81250 | G6PC (glucose-6-phosphatase, catalytic subunit) (eg, Glycogen storage   |
|       | disease, type 1a, von Gierke disease) gene analysis, common variants (eg, R83C, Q347X)  |
| 81251 | GBA (glucosidase, beta, acid) (eg, Gaucher disease) gene analysis, common   |
|       | variants (eg, N370S, 84GG, L444P, IVS2+1G>A)  |
| 81252 | GJB2 (gap junction protein, beta 2, 26kDa, connexin 26) (eg, nonsyndromic   |
|       | hearing loss) gene analysis; full gene sequence   |
| 81253 | GJB2 (gap junction protein, beta 2, 26kDa, connexin 26) (eg, nonsyndromic   |
| 04054 | hearing loss) gene analysis; known familial variants  |
| 81254 | GJB6 (gap junction protein, beta 6, 30kDa, connexin 30) (eg, nonsyndromic   |
|       | hearing loss) gene analysis, common variants (eg, 309kb [del(GJB6-<br>D13S1830)] and 232kb [del(GJB6-D13S1854)])                      |
| 81255 | D13S1830)] and 232kb [del(GJB6-D13S1854)])<br>HEXA (hexosaminidase A [alpha polypeptide]) (eg, Tay-Sachs disease) gene                |
|       | analysis, common variants (eg, 1278insTATC, 1421+1G>C, G269S)   |
| 81256 | HFE (hemochromatosis) (eg, hereditary hemochromatosis) gene analysis,   |
|       | common variants (eg, C282Y, H63D)   |
| 81257 | HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia, Hb  |
|       | Bart hydrops fetalis syndrome, HbH disease), gene analysis; common  |
|       | deletions or variant (eg, Southeast Asian, Thai, Filipino, Mediterranean,   |
|       | alpha3.7, alpha4.2, alpha20.5, Constant Spring)   |
| 81260 | IKBKAP (inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase   |
|       | complex-associated protein) (eg, familial dysautonomia) gene analysis,  |
|       | common variants (eg, 2507+6T>C, R696P)  |
| 81290 | MCOLN1 (mucolipin 1) (eg, Mucolipidosis, type IV) gene analysis, common   |
|       | variants (eg, IVS3-2A>G, del6.4kb)  |
| 81291 | MTHFR (5,10-methylenetetrahydrofolate reductase) (eg, hereditary  |

|       | hypercoagulability) gene analysis, common variants (eg, 677T, 1298C)  |
|-------|---|
| 81296 | MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary<br>non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known<br>familial variants  |
| 81302 | MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis; full sequence analysis  |
| 81304 | MECP2 (methyl CpG binding protein 2) (eg, Rett syndrome) gene analysis;<br>duplication/deletion variants  |
| 81322 | PTEN (phosphatase and tensin homolog) (eg, Cowden syndrome, PTEN hamartoma tumor syndrome) gene analysis; known familial variant  |
| 81325 | PMP22 (peripheral myelin protein 22) (eg, Charcot-Marie-Tooth, hereditary neuropathy with liability to pressure palsies) gene analysis; full sequence analysis  |
| 81330 | SMPD1(sphingomyelin phosphodiesterase 1, acid lysosomal) (eg, Niemann-<br>Pick disease, Type A) gene analysis, common variants (eg, R496L, L302P,<br>fsP330)  |
| 81331 | SNRPN/UBE3A (small nuclear ribonucleoprotein polypeptide N and ubiquitin protein ligase E3A) (eg, Prader-Willi syndrome and/or Angelman syndrome), methylation analysis   |
| 81332 | SERPINA1 (serpin peptidase inhibitor, clade A, alpha-1 antiproteinase,<br>antitrypsin, member 1) (eg, alpha-1-antitrypsin deficiency), gene analysis,<br>common variants (eg, *S and *Z)  |
| 81335 | PMT (thiopurine S-methyltransferase) (eg, drug metabolism), gene analysis, common variants (eg, *2, *3)   |
| 81350 | UGT1A1 (UDP glucuronosyltransferase 1 family, polypeptide A1) (eg, drug metabolism, hereditary unconjugated hyperbilirubinemia [Gilbert syndrome]) gene analysis, common variants (eg, *28, *36, *37)   |
| 81355 | VKORC1 (vitamin K epoxide reductase complex, subunit 1) (eg, warfarin metabolism), gene analysis, common variant(s) (eg, -1639G>A, c.173+1000C>T)   |
| 81412 | Ashkenazi Jewish associated disorders (eg, Bloom syndrome, Canavan<br>disease, cystic fibrosis, familial dysautonomia, Fanconi anemia group C,<br>Gaucher disease, Tay-Sachs disease), genomic sequence analysis panel, must<br>include sequencing of at least 9 genes, including ASPA, BLM, CFTR, FANCC,<br>GBA, HEXA, IKBKAP, MCOLN1, and SMPD1 |
| 81414 | Cardiac ion channelopathies (eg, Brugada syndrome, long QT syndrome, short<br>QT syndrome, catecholaminergic polymorphic ventricular tachycardia);<br>duplication/deletion gene analysis panel, must include analysis of at least 2<br>genes, including KCNH2 and KCNQ1   |
| 81434 | Hereditary retinal disorders (eg, retinitis pigmentosa, Leber congenital<br>amaurosis, cone-rod dystrophy), genomic sequence analysis panel, must<br>include sequencing of at least 15 genes, including ABCA4, CNGA1, CRB1, EYS,<br>PDE6A, PDE6B, PRPF31, PRPH2, RDH12, RHO, RP1, RP2, RPE65, RPGR, and<br>USH2A                                  |
| 81435 | Hereditary colon cancer disorders (eg, Lynch syndrome, PTEN hamartoma<br>syndrome, Cowden syndrome, familial adenomatosis polyposis); genomic<br>sequence analysis panel, must include sequencing of at least 10 genes,   |

|       | including APC, BMPR1A, CDH1, MLH1, MSH2, MSH6, MUTYH, PTEN, SMAD4, and STK11  |
|-------|---|
| 81437 | Hereditary neuroendocrine tumor disorders (eg, medullary thyroid<br>carcinoma, parathyroid carcinoma, malignant pheochromocytoma or<br>paraganglioma); genomic sequence analysis panel, must include sequencing<br>of at least 6 genes, including MAX, SDHB, SDHC, SDHD, TMEM127, and VHL |
| 81438 | Hereditary neuroendocrine tumor disorders (eg, medullary thyroid<br>carcinoma, parathyroid carcinoma, malignant pheochromocytoma or<br>paraganglioma); duplication/deletion analysis panel, must include analyses<br>for SDHB, SDHC, SDHD, and VHL  |
| 81465 | Whole mitochondrial genome large deletion analysis panel (eg, Kearns-Sayre syndrome, chronic progressive external ophthalmoplegia), including heteroplasmy detection, if performed  |
| 81171 | AFF2 (AF4/FMR2 family, member 2 [FMR2]) (eg, fragile X mental retardation 2 [FRAXE]) gene analysis; evaluation to detect abnormal (eg, expanded) alleles  |
| 81172 | AFF2 (AF4/FMR2 family, member 2 [FMR2]) (eg, fragile X mental retardation 2 [FRAXE]) gene analysis; characterization of alleles (eg, expanded size and methylation status)  |
| 81173 | AR (androgen receptor) (eg, spinal and bulbar muscular atrophy, Kennedy disease, X chromosome inactivation) gene analysis; full gene sequence   |
| 81174 | AR (androgen receptor) (eg, spinal and bulbar muscular atrophy, Kennedy disease, X chromosome inactivation) gene analysis; known familial variant   |
| 81177 | ATN1 (atrophin 1) (eg, dentatorubral-pallidoluysian atrophy) gene analysis, evaluation to detect abnormal (eg, expanded) alleles  |
| 81178 | ATXN1 (ataxin 1) (eg, spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (eg, expanded) alleles   |
| 81179 | ATXN2 (ataxin 2) (eg, spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (eg, expanded) alleles   |
| 81180 | ATXN3 (ataxin 3) (eg, spinocerebellar ataxia, Machado-Joseph disease) gene<br>analysis, evaluation to detect abnormal (eg, expanded) alleles  |
| 81181 | ATXN7 (ataxin 7) (eg, spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (eg, expanded) alleles   |
| 81182 | ATXN8OS (ATXN8 opposite strand [non-protein coding]) (eg, spinocerebellar<br>ataxia) gene analysis, evaluation to detect abnormal (eg, expanded) alleles  |
| 81183 | ATXN10 (ataxin 10) (eg, spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (eg, expanded) alleles   |
| 81184 | CACNA1A (calcium voltage-gated channel subunit alpha1 A) (eg,<br>spinocerebellar ataxia) gene analysis; evaluation to detect abnormal (eg,<br>expanded) alleles   |
| 81185 | CACNA1A (calcium voltage-gated channel subunit alpha1 A) (eg, spinocerebellar ataxia) gene analysis; full gene sequence   |
| 81186 | CACNA1A (calcium voltage-gated channel subunit alpha1 A) (eg, spinocerebellar ataxia) gene analysis; known familial variant   |
| 81187 | CNBP (CCHC-type zinc finger nucleic acid binding protein) (eg, myotonic dystrophy type 2) gene analysis, evaluation to detect abnormal (eg, expanded) alleles   |
| 81188 | CSTB (cystatin B) (eg, Unverricht-Lundborg disease) gene analysis; evaluation   |

|       | to detect abnormal (eg, expanded) alleles  |
|-------|--|
| 81189 | CSTB (cystatin B) (eg, Unverricht-Lundborg disease) gene analysis; full gene   |
|       | sequence   |
| 81190 | CSTB (cystatin B) (eg, Unverricht-Lundborg disease) gene analysis; known   |
|       | familial variant(s)  |
| 81200 | ASPA (aspartoacylase) (eg, Canavan disease) gene analysis, common variants   |
|       | (eg, E285A, Y231X)   |
| 81202 | APC (adenomatous polyposis coli) (eg, familial adenomatosis polyposis [FAP],   |
|       | attenuated FAP) gene analysis; known familial variants   |
| 81204 | AR (androgen receptor) (eg, spinal and bulbar muscular atrophy, Kennedy  |
|       | disease, X chromosome inactivation) gene analysis; characterization of alleles   |
| 04045 | (eg, expanded size or methylation status)  |
| 81215 | BRCA1 (BRCA1, DNA repair associated) (eg, hereditary breast and ovarian  |
| 01017 | cancer) gene analysis; known familial variant  |
| 81217 | BRCA2 (BRCA2, DNA repair associated) (eg, hereditary breast and ovarian  |
| 81221 | cancer) gene analysis; known familial variant<br>CFTR (cystic fibrosis transmembrane conductance regulator) (eg, cystic  |
| 01221 | fibrosis) gene analysis; known familial variants   |
| 81224 | CFTR (cystic fibrosis transmembrane conductance regulator) (eg, cystic   |
| 01221 | fibrosis) gene analysis; intron 8 poly-T analysis (eg, male infertility)   |
| 81234 | DMPK (DM1 protein kinase) (eg, myotonic dystrophy type 1) gene analysis;   |
|       | evaluation to detect abnormal (expanded) alleles   |
| 81239 | DMPK (DM1 protein kinase) (eg, myotonic dystrophy type 1) gene analysis;   |
|       | characterization of alleles (eg, expanded size)  |
| 81244 | FMR1 (fragile X mental retardation 1) (eg, fragile X mental retardation) gene  |
| -     | analysis; evaluation to detect abnormal (eg, expanded) alleles   |
| 81247 | G6PD (glucose-6-phosphate dehydrogenase) (eg, hemolytic anemia,  |
|       | jaundice), gene analysis; common variant(s) (eg, A, A-)  |
| 81248 | G6PD (glucose-6-phosphate dehydrogenase) (eg, hemolytic anemia,  |
| 01240 | jaundice), gene analysis; known familial variant(s)  |
| 81249 | G6PD (glucose-6-phosphate dehydrogenase) (eg, hemolytic anemia,  |
| 81258 | jaundice), gene analysis; full gene sequence<br>HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia, Hb |
| 01230 | Bart hydrops fetalis syndrome, HbH disease), gene analysis; known familial   |
|       | variant  |
| 81259 | HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia, Hb   |
|       | Bart hydrops fetalis syndrome, HbH disease), gene analysis; full gene  |
|       | sequence   |
| 81269 | HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia, Hb   |
|       | Bart hydrops fetalis syndrome, HbH disease), gene analysis;  |
|       | duplication/deletion variants  |
| 81271 | HTT (huntingtin) (eg, Huntington disease) gene analysis; evaluation to detect  |
|       | abnormal (eg, expanded) alleles  |
| 81274 | HTT (huntingtin) (eg, Huntington disease) gene analysis; characterization of   |
| 01224 | alleles (eg, expanded size)  |
| 81284 | FXN (frataxin) (eg, Friedreich ataxia) gene analysis; evaluation to detect   |
|       | abnormal (expanded) alleles  |

| 81285 | FXN (frataxin) (eg, Friedreich ataxia) gene analysis; characterization of alleles (eg, expanded size)   |
|-------|---|
| 81286 | FXN (frataxin) (eg, Friedreich ataxia) gene analysis; full gene sequence  |
| 81289 | FXN (frataxin) (eg, Friedreich ataxia) gene analysis; known familial variant(s)   |
| 81293 | MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary<br>non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known<br>familial variants  |
| 81336 | SMN1 (survival of motor neuron 1, telomeric) (eg, spinal muscular atrophy) gene analysis; full gene sequence  |
| 81337 | SMN1 (survival of motor neuron 1, telomeric) (eg, spinal muscular atrophy) gene analysis; known familial sequence variant(s)  |
| 81343 | PPP2R2B (protein phosphatase 2 regulatory subunit Bbeta) (eg,<br>spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (eg,<br>expanded) alleles   |
| 81344 | BP (TATA box binding protein) (eg, spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (eg, expanded) alleles  |
| 81349 | Cytogenomic (genome-wide) analysis for constitutional chromosomal<br>abnormalities; interrogation of genomic regions for copy number and loss-of-<br>heterozygosity variants, low-pass sequencing analysis  |
| 81361 | HBB (hemoglobin, subunit beta) (eg, sickle cell anemia, beta thalassemia, hemoglobinopathy); common variant(s) (eg, HbS, HbC, HbE)  |
| 81362 | HBB (hemoglobin, subunit beta) (eg, sickle cell anemia, beta thalassemia, hemoglobinopathy); known familial variant(s)  |
| 81363 | HBB (hemoglobin, subunit beta) (eg, sickle cell anemia, beta thalassemia, hemoglobinopathy); duplication/deletion variant(s)  |
| 81364 | HBB (hemoglobin, subunit beta) (eg, sickle cell anemia, beta thalassemia, hemoglobinopathy); full gene sequence   |
| 81439 | Hereditary neuroendocrine tumor disorders (eg, medullary thyroid<br>carcinoma, parathyroid carcinoma, malignant pheochromocytoma or<br>paraganglioma); duplication/deletion analysis panel, must include analyses<br>for SDHB, SDHC, SDHD, and VHL  |
| 81442 | Noonan spectrum disorders (eg, Noonan syndrome, cardio-facio-cutaneous<br>syndrome, Costello syndrome, LEOPARD syndrome, Noonan-like syndrome),<br>genomic sequence analysis panel, must include sequencing of at least 12<br>genes, including BRAF, CBL, HRAS, KRAS, MAP2K1, MAP2K2, NRAS, PTPN11,<br>RAF1, RIT1, SHOC2, and SOS1  |
| 81443 | Genetic testing for severe inherited conditions (eg, cystic fibrosis, Ashkenazi<br>Jewish-associated disorders [eg, Bloom syndrome, Canavan disease, Fanconi<br>anemia type C, mucolipidosis type VI, Gaucher disease, Tay-Sachs disease],<br>beta hemoglobinopathies, phenylketonuria, galactosemia), genomic<br>sequence analysis panel, must include sequencing of at least 15 genes (eg,<br>ACADM, ARSA, ASPA, ATP7B, BCKDHA, BCKDHB, BLM, CFTR, DHCR7, FANCC,<br>G6PC, GAA, GALT, GBA, GBE1, HBB, HEXA, IKBKAP, MCOLN1, PAH) |
| 81448 | Hereditary peripheral neuropathies (eg, Charcot-Marie-Tooth, spastic<br>paraplegia), genomic sequence analysis panel, must include sequencing of at<br>least 5 peripheral neuropathy-related genes (eg, BSCL2, GJB1, MFN2, MPZ,<br>REEP1, SPAST, SPG11, SPTLC1)   |

| 81519 | Oncology (breast), mRNA, gene expression profiling by real-time RT-PCR of 21 |
|-------|--|
|       | genes, utilizing formalin-fixed paraffin embedded tissue, algorithm reported |
|       | as recurrence score  |

• The following codes will deny if billed more than two (2) units per lifetime.

| Code  | Policy   |
|-------|--|
| 81163 | BRCA1 (BRCA1, DNA repair associated), BRCA2 (BRCA2, DNA repair                               |
|       | associated) (eg, hereditary breast and ovarian cancer) gene analysis; full sequence analysis |

## **Questions?**

If you have questions, contact your Aetna Better Health of New Jersey Provider Relations Representative.