

**Advisory Panel on Clinical Diagnostic Laboratory Tests (CDLT)**  
**Centers for Medicare & Medicaid Services (CMS)**  
**Voting Results and Recommendations**  
**July 31–August 1, 2017\***

\* Nine voting members attended the meeting on July 31, 2017; ten voting members attended on August 1, 2017.

| <b>CPT/HCPCS code</b>                     | <b>Code Description</b>  | <b>Panel Crosswalk/Gapfill Recommendation</b>      |
|---|--|--|
| <i>New Codes:<br/>Molecular Pathology</i> |  |  |
| 81X04                                     | ASXL1 (additional sex combs like 1, transcriptional regulator) (eg, myelodysplastic syndrome, myeloproliferative neoplasms, chronic myelomonocytic leukemia) gene analysis; full gene sequence                       | 1: Gapfill<br>8: 81317                             |
| 81X05                                     | ASXL1 (additional sex combs like 1, transcriptional regulator) (eg, myelodysplastic syndrome, myeloproliferative neoplasms, chronic myelomonocytic leukemia) gene analysis; targeted sequence analysis (eg, exon 12) | 0: Gapfill<br>9: 81218                             |
| 81X30                                     | CYP3A4 (cytochrome P450 family 3 subfamily A member 4) (eg, drug metabolism) gene analysis, common variant(s) (eg, *2, *22)  | 0: Gapfill<br>3: 81227<br>6: 81374 x 2             |
| 81X31                                     | CYP3A5 (cytochrome P450 family 3 subfamily A member 5) (eg, drug metabolism) gene analysis, common variants (eg, *2, *3, *4, *5 *6, *7)  | 0: Gapfill<br>7: 81225<br>2: 81227                 |
| 81X32                                     | DPYD (dihydropyrimidine dehydrogenase) (eg, 5-fluorouracil/5-FU and capecitabine drug metabolism) gene analysis, common variant(s) (eg, *2A, *4, *5, *6)   | 0: Gapfill<br>8: 81227<br>1: 81321                 |
| 81X25                                     | F9 (coagulation factor IX) (eg, hemophilia B) full gene sequence   | 0: Gapfill<br>6: 81321<br>3: 81374 x 2             |
| 81X37                                     | G6PD (glucose-6-phosphate dehydrogenase) (eg, hemolytic anemia, jaundice) gene analysis; common variant(s) (eg, A, A-)   | 0: Gapfill<br>3: 81227<br>3: 81374 x 2<br>3: 81215 |

|       |  |  |
|-------|--|--|
| 81X38 | G6PD (glucose-6-phosphate dehydrogenase) (eg, hemolytic anemia, jaundice) gene analysis; known familial variant(s)   | 0: Gapfill<br>9: 81215                 |
| 81X40 | G6PD (glucose-6-phosphate dehydrogenase) (eg, hemolytic anemia, jaundice) gene analysis; full gene sequence  | 0: Gapfill<br>3: 81161<br>6: 81321     |
| 81X58 | HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia, Hb Bart hydrops fetalis syndrome, HbH disease), gene analysis; known familial variant  | 0: Gapfill<br>8: 81215 x 2<br>1: 81235 |
| 81X59 | HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia, Hb Bart hydrops fetalis syndrome, HbH disease), gene analysis; full gene sequence  | 1: Gapfill<br>1: 81235<br>7: 81321     |
| 81X69 | HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia, Hb Bart hydrops fetalis syndrome, HbH disease), gene analysis; duplication/deletion variants   | 0: Gapfill<br>6: 81294<br>3: 81376     |
| 81X15 | Human Platelet Antigen 1 genotyping (HPA-1), ITGB3 (integrin, beta 3 [platelet glycoprotein IIIa], antigen CD61 [GPIIIa]) (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura) gene analysis, common variant, HPA-1a/b (L33P)                       | 0: Gapfill<br>9: 81376                 |
| 81X16 | Human Platelet Antigen 2 genotyping (HPA-2), GP1BA (glycoprotein Ib [platelet], alpha polypeptide [GPIba]) (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura) gene analysis, common variant, HPA-2a/b (T145M)                                     | 0: Gapfill<br>9: 81376                 |
| 81X17 | Human Platelet Antigen 3 genotyping (HPA-3), ITGA2B (integrin, alpha 2b [platelet glycoprotein IIb of IIb/IIIa complex], antigen CD41 [GPIIb]) (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura) gene analysis, common variant, HPA-3a/b (I843S) | 0: Gapfill<br>9: 81376                 |
| 81X18 | Human Platelet Antigen 4 genotyping (HPA-4), ITGB3 (integrin, beta 3 [platelet glycoprotein IIIa], antigen CD61 [GPIIIa]) (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura) gene analysis, common variant, HPA-4a/b (R143Q)                      | 0: Gapfill<br>9: 81376                 |

|       |   |  |
|-------|---|--|
| 81X19 | Human Platelet Antigen 5 genotyping (HPA-5), ITGA2 (integrin, alpha 2 [CD49B, alpha 2 subunit of VLA-2 receptor] [GPIa]) (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura) gene analysis, common variant (eg, HPA-5a/b (K505E))                   | 0: Gapfill<br>9: 81376                 |
| 81X20 | Human Platelet Antigen 6 genotyping (HPA-6w), ITGB3 (integrin, beta 3 [platelet glycoprotein IIIa, antigen CD61] [GPIIIa]) (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura) gene analysis, common variant, HPA-6a/b (R489Q)                      | 0: Gapfill<br>9: 81376                 |
| 81X21 | Human Platelet Antigen 9 genotyping (HPA-9w), ITGA2B (integrin, alpha 2b [platelet glycoprotein IIb of IIb/IIIa complex, antigen CD41] [GPIIb]) (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura) gene analysis, common variant, HPA-9a/b (V837M) | 0: Gapfill<br>9: 81376                 |
| 81X22 | Human Platelet Antigen 15 genotyping (HPA-15), CD109 (CD109 molecule) (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura) gene analysis, common variant, HPA-15a/b (S682Y)  | 0: Gapfill<br>9: 81376                 |
| 81X23 | IDH1 (isocitrate dehydrogenase 1 [NADP+], soluble) (eg, glioma), common variants (eg, R132H, R132C)   | 0: Gapfill<br>9: 81275                 |
| 81X24 | IDH2 (isocitrate dehydrogenase 2 [NADP+], mitochondrial) (eg, glioma), common variants (eg, R140W, R172M)   | 0: Gapfill<br>9: 81311                 |
| 81X33 | IFNL3 (interferon, lambda 3) (eg, drug response) gene analysis, rs12979860 variant  | 0: Gapfill<br>1: 81374 x 2<br>8: 81241 |
| 813XX | 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)   | 1: Gapfill<br>1: 81235<br>7: 81235 x 2 |
| 81X34 | SLCO1B1 (solute carrier organic anion transporter family, member 1B1) (eg, adverse drug reaction) gene analysis, common variant(s) (eg, *5)   | 0: Gapfill<br>2: 81381<br>7: 81376     |

|  |  |  |
|--|--|--|
| 81X35  | TPMT (thiopurine S-methyltransferase) (eg, drug metabolism) gene analysis, common variants (eg, *2, *3)  | 0: Gapfill<br>5: 81374 x 2<br>4: 81227               |
| 81X36  | TYMS (thymidylate synthetase) (eg, 5-fluorouracil/5-FU drug metabolism) gene analysis, common variant(s) (eg, tandem repeat variant)   | 0: Gapfill<br>9: 81245                               |
| 813X1  | HBB (hemoglobin, subunit beta) (eg, sickle cell anemia, beta thalassemia, hemoglobinopathy); common variant(s) (eg, HbS, HbC, HbE)   | 0: Gapfill<br>9: 81227                               |
| 813X2  | HBB (hemoglobin, subunit beta) (eg, sickle cell anemia, beta thalassemia, hemoglobinopathy); known familial variant(s)   | 0: Gapfill<br>8: 81215 x 2<br>1: 81275               |
| 813X3  | HBB (hemoglobin, subunit beta) (eg, sickle cell anemia, beta thalassemia, hemoglobinopathy); duplication/deletion variant(s)   | 0: Gapfill<br>9: 81294                               |
| 813X4  | HBB (hemoglobin, subunit beta) (eg, sickle cell anemia, beta thalassemia, hemoglobinopathy); full gene sequence  | 1: Gapfill<br>8: 81235                               |
| <b><i>New Codes; Genomic Sequencing Procedures and Other Molecular Multianalyte Assays</i></b> |  |  |
| 814X5  | Hereditary peripheral neuropathies panel (eg, Charcot-Marie-Tooth, spastic paraplegia), genomic sequence analysis panel, must include sequencing of at least 5 peripheral neuropathy-related genes (eg, BSCL2, GJB1, MFN2, MPZ, REEP1, SPAST, SPG11, and SPTLC1) | 4: Gapfill<br>4: 81439<br>1: Either gapfill or 81439 |
| <b><i>Multianalyte Assays with Algorithmic Analyses</i></b>                                    |  |  |
| 815XX  | Oncology (breast), mRNA gene expression profiling by hybrid capture of 58 genes (50 content and 8 housekeeping), utilizing formalin-fixed paraffin-embedded tissue, algorithm reported as a recurrence risk score  | 1: Gapfill<br>6: 0008M<br>1: 87501<br>1: Recusal     |

|  |  |  |
|--|--|--|
| 815X2  | Oncology (breast), mRNA, microarray gene expression profiling of 70 content genes and 465 housekeeping genes, utilizing fresh frozen or formalin-fixed paraffin-embedded tissue, algorithm reported as index related to risk of distant metastasis | 2: Gapfill<br>6: 81519<br>1: Recusal                                 |
| 81X41  | Oncology (prostate), mRNA gene expression profiling by real-time RT-PCR of 46 genes (31 content and 15 housekeeping), utilizing formalin-fixed paraffin embedded tissue, algorithm reported as a disease-specific mortality risk score             | 5: Gapfill<br>4: 81519   |
| 815X1  | 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          | 8: Gapfill<br>1: 81241   |
| <b><i>New Codes:<br/>Immunology</i></b>                          |  |  |
| 8600X  | Allergen specific IgE; quantitative or semiquantitative, recombinant or purified component, each   | 5: Gapfill<br>1: 86003 x 4<br>1: 86003 x 5<br>1: 86157<br>1: Recusal |
| 86X7X  | Zika virus, IgM  | 0: Gapfill<br>7: 86788<br>3: 86356                                   |
| <b><i>New Codes:<br/>Microbiology</i></b>                        |  |  |
| 876XX  | Infectious agent detection by nucleic acid (DNA or RNA); respiratory syncytial virus, amplified probe technique  | 0: Gapfill<br>2: 87798<br>8: 87801                                   |
| 87X6X  | Infectious agent detection by nucleic acid (DNA or RNA); Zika virus, amplified probe technique   | 0: Gapfill<br>1: 87798<br>6: 87501<br>3: 87502                       |
| <b><i>New Codes:<br/>Proprietary<br/>Laboratory Analysis</i></b> |  |  |
| 0001U  | Red blood cell antigen typing, DNA, human erythrocyte antigen gene analysis of 35 antigens from 11 blood groups, utilizing whole blood, common RBC alleles reported  | 7: Gapfill<br>3: 81403   |

|       |   |   |
|-------|---|---|
| 0002U | Oncology (colorectal), quantitative assessment of three urine metabolites (ascorbic acid, succinic acid and carnitine) by liquid chromatography with tandem mass spectrometry (LC-MS/MS) using multiple reaction monitoring acquisition, algorithm reported as likelihood of adenomatous polyps   | 10: Gapfill   |
| 0003U | Oncology (ovarian) biochemical assays of five proteins (apolipoprotein A-1, CA 125 II, follicle stimulating hormone, human epididymis protein 4, transferrin), utilizing serum, algorithm reported as a likelihood score  | 8: Gapfill<br>1: 81539 x 1.25<br>1: 81539           |
| 0004U | Infectious disease (bacterial), DNA, 27 resistance genes, PCR amplification and probe hybridization in microarray format (molecular detection and identification of AmpC, carbapenemase and ESBL coding genes), bacterial culture colonies, report of genes detected or not detected, per isolate   | 4: Gapfill<br>2: 87633<br>2: 87507<br>2: 87150 x 10 |
| 0005U | Oncology (prostate) gene expression profile by real-time RT-PCR of 3 genes (ERG, PCA3, and SPDEF), urine, algorithm reported as risk score  | 6: Gapfill<br>4: 81539                              |
| 0006U | Prescription drug monitoring, 120 or more drugs and substances, definitive tandem mass spectrometry with chromatography, urine, qualitative report of presence (including quantitative levels, when detected) or absence of each drug or substance with description and severity of potential interactions, with identified substances, per date of service | 7: Gapfill<br>3: G0483                              |
| 0007U | Drug test(s), presumptive, with definitive confirmation of positive results, any number of drug classes, urine, includes specimen verification including DNA authentication in comparison to buccal DNA, per date of service  | 6: Gapfill<br>3: G0480<br>1: 81265                  |
| 0008U | Helicobacter pylori detection and antibiotic resistance, DNA, 16S and 23S rRNA, gyrA, pbp1, rdxA and rpoB, next generation sequencing, formalin-fixed paraffin embedded or fresh tissue, predictive, reported as positive or negative for resistance to clarithromycin, fluoroquinolones, metronidazole, amoxicillin, tetracycline and rifabutin            | 10: Gapfill   |
| 0009U | Oncology (breast cancer), ERBB2 (HER2) copy number by FISH, tumor cells from formalin fixed paraffin embedded tissue isolated using image-based dielectrophoresis (DEP) sorting, reported as ERBB2 gene amplified or non-amplified  | 9: Gapfill<br>1: Crosswalk to code for ERBB2 FISH   |

|                        |  |  |
|------------------------|--|--|
| 0010U                  | Infectious disease (bacterial), strain typing by whole genome sequencing, phylogenetic-based report of strain relatedness, per submitted isolate   | 7: Gapfill<br>1: 87153 + 87900<br>1: (87153 x 3) + 87900<br>1: 87153 |
| 0011U                  | Prescription drug monitoring, evaluation of drugs present by LC-MS/MS, using oral fluid, reported as a comparison to an estimated steady-state range, per date of service including all drug compounds and metabolites | 7: Gapfill<br>3: G0480   |
| 0012U                  | Germline disorders, gene rearrangement detection by whole genome next-generation sequencing, DNA, whole blood, report of specific gene rearrangement(s)  | 7: Gapfill<br>1: 81316<br>2: (81316 x 2) + 81450                     |
| 0013U                  | Oncology (solid organ neoplasia), gene rearrangement detection by whole genome next-generation sequencing, DNA, fresh or frozen tissue or cells, report of specific gene rearrangement(s)                              | 8: Gapfill<br>1: (81316 x 2) + 81445<br>1: 81316                     |
| 0014U                  | Hematology (hematolymphoid neoplasia), gene rearrangement detection by whole genome next-generation sequencing, DNA, whole blood or bone marrow, report of specific gene rearrangement(s)                              | 8: Gapfill<br>1: (81316 x 2) + 81450<br>1: 81316                     |
| 0015U                  | Drug metabolism (adverse drug reactions), DNA, 22 drug metabolism and transporter genes, real-time PCR, blood or buccal swab, genotype and metabolizer status for therapeutic decision support                         | 5: Gapfill<br>5: 81432   |
| 0016U                  | Oncology (hematolymphoid neoplasia), RNA, BCR/ABL1 major and minor breakpoint fusion transcripts, quantitative PCR amplification, blood or bone marrow, report of fusion not detected or detected with quantitation    | 1: Gapfill<br>4: 81206<br>5: 81206 + (81207 x 0.5)                   |
| 0017U                  | Oncology (hematolymphoid neoplasia), JAK2 mutation, DNA, PCR amplification of exons 12-14 and sequence analysis, blood or bone marrow, report of JAK2 mutation not detected or detected                                | 1: Gapfill<br>7: 81275<br>2: 81275 + 81276                           |
| <i>Other New Codes</i> |  |  |
| 02X1T                  | Infectious agent detection by nucleic acid (DNA or RNA), Human Papillomavirus (HPV) for five or more separately reported high-risk HPV types (eg, 16,18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68) (ie, genotyping)  | <b>Withdrawn from consideration</b>                                  |

|                                  |  |   |
|----------------------------------|--|---|
| G0499                            | Hepatitis B screening in non-pregnant, high risk individual includes hepatitis B surface antigen (HBsAg) followed by a neutralizing confirmatory test for initially reactive results, and antibodies to HBsAg (anti-HBs) and hepatitis B core antigen (anti-HBc) | 1: Gapfill<br>6: 87340; if positive, follow up with 87341 + 86706 + 86704<br>2: 87340 + 87341 + 86706 + 86704<br>1: 87340 |
| <b><i>Reconsidered Codes</i></b> |  |   |
| 81327                            | SEPT9 (Septin9) (eg, colorectal cancer) methylation analysis   | 0: Gapfill<br>8: 81288<br>1: 81287<br>1: Recusal  |