A-1 Radiology	
Code	**Code Description**
70336	Magnetic resonance (eg, proton) imaging, temporomandibular joint(s)
70450	Computed tomography, head or brain; without contrast material
70460	Computed tomography, head or brain; with contrast material(s)
70470	Computed tomography, head or brain; without contrast material, followed by contrast material(s) and further sections
70480	Computed tomography, orbit, sella, or posterior fossa or outer, middle, or inner ear; without contrast material
70481	Computed tomography, orbit, sella, or posterior fossa or outer, middle, or inner ear; with contrast material(s)
70482	Computed tomography, orbit, sella, or posterior fossa or outer, middle, or inner ear; without contrast material, followed by contrast material(s) and further sections
70486	Computed tomography, maxillofacial area; without contrast material
70487	Computed tomography, maxillofacial area; with contrast material(s)
70488	Computed tomography, maxillofacial area; without contrast material, followed by contrast material(s) and further sections
70490	Computed tomography, soft tissue neck; without contrast material
70491	Computed tomography, soft tissue neck; with contrast material(s)
70492	Computed tomography, soft tissue neck; without contrast material followed by contrast material(s) and further sections
70496	Computed tomographic angiography, head, with contrast material(s), including noncontrast images, if performed, and image postprocessing
70498	Computed tomographic angiography, neck, with contrast material(s), including noncontrast images, if performed, and image postprocessing
70540	Magnetic resonance (eg, proton) imaging, orbit, face, and/or neck; without contrast material(s)
70542	Magnetic resonance (eg, proton) imaging, orbit, face, and/or neck; with contrast material(s)
70543	Magnetic resonance (eg, proton) imaging, orbit, face, and/or neck; without contrast material(s), followed by contrast material(s) and further sequences
70544	Magnetic resonance angiography, head; without contrast material(s)
70545	Magnetic resonance angiography, head; with contrast material(s)
70546	Magnetic resonance angiography, head; without contrast material(s), followed by contrast material(s) and further sequences
70547	Magnetic resonance angiography, neck; without contrast material(s)
70548	Magnetic resonance angiography, neck; with contrast material(s)
70549	Magnetic resonance angiography, neck; without contrast material(s), followed by contrast material(s) and further sequences
70551	Magnetic resonance (eg, proton) imaging, brain (including brain stem); without contrast material
70552	Magnetic resonance (eg, proton) imaging, brain (including brain stem); with contrast material(s)
70553	Magnetic resonance (eg, proton) imaging, brain (including brain stem); without contrast material, followed by contrast material(s) and further sequences
70554	Magnetic resonance imaging, brain, functional MRI; including test selection and administration of repetitive body part movement and/or visual stimulation, not requiring physician or psychologist administration

A-1 Radiology	
Code	**Code Description**
70555	Magnetic resonance imaging, brain, functional MRI; requiring physician or psychologist administration of entire neurofunctional testing
71250	Computed tomography, thorax; without contrast material
71260	Computed tomography, thorax; with contrast material(s)
71270	Computed tomography, thorax; without contrast material, followed by contrast material(s) and further sections
71275	Computed tomographic angiography, chest (noncoronary), with contrast material(s), including noncontrast images, if performed, and image postprocessing
71550	Magnetic resonance (eg, proton) imaging, chest (eg, for evaluation of hilar and mediastinal lymphadenopathy); without contrast material(s)
71551	Magnetic resonance (eg, proton) imaging, chest (eg, for evaluation of hilar and mediastinal lymphadenopathy); with contrast material(s)
71552	Magnetic resonance (eg, proton) imaging, chest (eg, for evaluation of hilar and mediastinal lymphadenopathy); without contrast material(s), followed by contrast material(s) and further sequences
71555	Magnetic resonance angiography, chest (excluding myocardium), with or without contrast material(s)
72125	Computed tomography, cervical spine; without contrast material
72126	Computed tomography, cervical spine; with contrast material
72127	Computed tomography, cervical spine; without contrast material, followed by contrast material(s) and further sections
72128	Computed tomography, thoracic spine; without contrast material
72129	Computed tomography, thoracic spine; with contrast material
72130	Computed tomography, thoracic spine; without contrast material, followed by contrast material(s) and further sections
72131	Computed tomography, lumbar spine; without contrast material
72132	Computed tomography, lumbar spine; with contrast material
72133	Computed tomography, lumbar spine; without contrast material, followed by contrast material(s) and further sections
72141	Magnetic resonance (eg, proton) imaging, spinal canal and contents, cervical; without contrast material
72142	Magnetic resonance (eg, proton) imaging, spinal canal and contents, cervical; with contrast material(s)
72146	Magnetic resonance (eg, proton) imaging, spinal canal and contents, thoracic; without contrast material
72147	Magnetic resonance (eg, proton) imaging, spinal canal and contents, thoracic; with contrast material(s)
72148	Magnetic resonance (eg, proton) imaging, spinal canal and contents, lumbar; without contrast material
72149	Magnetic resonance (eg, proton) imaging, spinal canal and contents, lumbar; with contrast material(s)
72156	Magnetic resonance (eg, proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; cervical
72157	Magnetic resonance (eg, proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; thoracic
72158	Magnetic resonance (eg, proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; lumbar
72159	Magnetic resonance angiography, spinal canal and contents, with or without contrast material(s)
72191	Computed tomographic angiography, pelvis, with contrast material(s), including noncontrast images, if performed, and image postprocessing

A-1 Radiology	
Code	**Code Description**
72192	Computed tomography, pelvis; without contrast material
72193	Computed tomography, pelvis; with contrast material(s)
72194	Computed tomography, pelvis; without contrast material, followed by contrast material(s) and further sections
72195	Magnetic resonance (eg, proton) imaging, pelvis; without contrast material(s)
72196	Magnetic resonance (eg, proton) imaging, pelvis; with contrast material(s)
72197	Magnetic resonance (eg, proton) imaging, pelvis; without contrast material(s), followed by contrast material(s) and further sequences
72198	Magnetic resonance angiography, pelvis, with or without contrast material(s)
73200	Computed tomography, upper extremity; without contrast material
73201	Computed tomography, upper extremity; with contrast material(s)
73202	Computed tomography, upper extremity; without contrast material, followed by contrast material(s) and further sections
73206	Computed tomographic angiography, upper extremity, with contrast material(s), including noncontrast images, if performed, and image postprocessing
73218	Magnetic resonance (eg, proton) imaging, upper extremity, other than joint; without contrast material(s)
73219	Magnetic resonance (eg, proton) imaging, upper extremity, other than joint; with contrast material(s)
73220	Magnetic resonance (eg, proton) imaging, upper extremity, other than joint; without contrast material(s), followed by contrast material(s) and further sequences
73221	Magnetic resonance (eg, proton) imaging, any joint of upper extremity; without contrast material(s)
73222	Magnetic resonance (eg, proton) imaging, any joint of upper extremity; with contrast material(s)
73223	Magnetic resonance (eg, proton) imaging, any joint of upper extremity; without contrast material(s), followed by contrast material(s) and further sequences
73225	Magnetic resonance angiography, upper extremity, with or without contrast material(s)
73700	Computed tomography, lower extremity; without contrast material
73701	Computed tomography, lower extremity; with contrast material(s)
73702	Computed tomography, lower extremity; without contrast material, followed by contrast material(s) and further sections
73706	Computed tomographic angiography, lower extremity, with contrast material(s), including noncontrast images, if performed, and image postprocessing
73718	Magnetic resonance (eg, proton) imaging, lower extremity other than joint; without contrast material(s)
73719	Magnetic resonance (eg, proton) imaging, lower extremity other than joint; with contrast material(s)
73720	Magnetic resonance (eg, proton) imaging, lower extremity other than joint; without contrast material(s), followed by contrast material(s) and further sequences
73721	Magnetic resonance (eg, proton) imaging, any joint of lower extremity; without contrast material
73722	Magnetic resonance (eg, proton) imaging, any joint of lower extremity; with contrast material(s)
73723	Magnetic resonance (eg, proton) imaging, any joint of lower extremity; without contrast material(s), followed by contrast material(s) and further sequences
73725	Magnetic resonance angiography, lower extremity, with or without contrast material(s)
74150	Computed tomography, abdomen; without contrast material
74160	Computed tomography, abdomen; with contrast material(s)

A-1 Radiology	
Code	**Code Description**
74170	Computed tomography, abdomen; without contrast material, followed by contrast material(s) and further sections
74174	Computed tomographic angiography, abdomen and pelvis, with contrast material(s), including noncontrast images, if performed, and image postprocessing
74175	Computed tomographic angiography, abdomen, with contrast material(s), including noncontrast images, if performed, and image postprocessing
74176	Computed tomography, abdomen and pelvis; without contrast material
74177	Computed tomography, abdomen and pelvis; with contrast material(s)
74178	Computed tomography, abdomen and pelvis; without contrast material in one or both body regions, followed by contrast material(s) and further sections in one or both body regions
74181	Magnetic resonance (eg, proton) imaging, abdomen; without contrast material(s)
74182	Magnetic resonance (eg, proton) imaging, abdomen; with contrast material(s)
74183	Magnetic resonance (eg, proton) imaging, abdomen; without contrast material(s), followed by with contrast material(s) and further sequences
74185	Magnetic resonance angiography, abdomen, with or without contrast material(s)
74261	Computed tomographic (CT) colonography, diagnostic, including image postprocessing; without contrast material
74262	Computed tomographic (CT) colonography, diagnostic, including image postprocessing; with contrast material(s) including non-contrast images, if performed
74263	Computed tomographic (CT) colonography, screening, including image postprocessing
74712	Magnetic resonance (eg, proton) imaging, fetal, including placental and maternal pelvic imaging when performed; single or first gestation
74713	Magnetic resonance (eg, proton) imaging, fetal, including placental and maternal pelvic imaging when performed; each additional gestation (List separately in addition to code for primary procedure)
75557	Cardiac magnetic resonance imaging for morphology and function without contrast material;
75559	Cardiac magnetic resonance imaging for morphology and function without contrast material; with stress imaging
75561	Cardiac magnetic resonance imaging for morphology and function without contrast material(s), followed by contrast material(s) and further sequences;
75563	Cardiac magnetic resonance imaging for morphology and function without contrast material(s), followed by contrast material(s) and further sequences; with stress imaging
75565	Cardiac magnetic resonance imaging for velocity flow mapping (List separately in addition to code for primary procedure)
75571	Computed tomography, heart, without contrast material, with quantitative evaluation of coronary calcium
75572	Computed tomography, heart, with contrast material, for evaluation of cardiac structure and morphology (including 3D image postprocessing, assessment of cardiac function, and evaluation of venous structures, if performed)
75573	Computed tomography, heart, with contrast material, for evaluation of cardiac structure and morphology in the setting of congenital heart disease (including 3D image postprocessing, assessment of LV cardiac function, RV structure and function and evaluation of venous structures, if performed)

A-1 Radiology	
Code	**Code Description**
75574	Computed tomographic angiography, heart, coronary arteries and bypass grafts (when present), with contrast material, including 3D image postprocessing (including evaluation of cardiac structure and morphology, assessment of cardiac function, and evaluation of venous structures, if performed)
75635	Computed tomographic angiography, abdominal aorta and bilateral iliofemoral lower extremity runoff, with contrast material(s), including noncontrast images, if performed, and image postprocessing
76376	3D rendering with interpretation and reporting of computed tomography, magnetic resonance imaging, ultrasound, or other tomographic modality with image postprocessing under concurrent supervision; not requiring image postprocessing on an independent workstation
76376	3D rendering with interpretation and reporting of computed tomography, magnetic resonance imaging, ultrasound, or other tomographic modality with image postprocessing under concurrent supervision; not requiring image postprocessing on an independent workstation
76377	3D rendering with interpretation and reporting of computed tomography, magnetic resonance imaging, ultrasound, or other tomographic modality with image postprocessing under concurrent supervision; requiring image postprocessing on an independent workstation
76380	Computed tomography, limited or localized follow-up study
76390	Magnetic resonance spectroscopy
76497	Unlisted computed tomography procedure (eg, diagnostic, interventional)
76498	Unlisted magnetic resonance procedure (eg, diagnostic, interventional)
76506	Echoencephalography, real time with image documentation (gray scale) (for determination of ventricular size, delineation of cerebral contents, and detection of fluid masses or other intracranial abnormalities), including A-mode encephalography as secondary component where indicated
76536	Ultrasound, soft tissues of head and neck (eg, thyroid, parathyroid, parotid), real time with image documentation
76604	Ultrasound, chest (includes mediastinum), real time with image documentation
76641	Ultrasound, breast, unilateral, real time with image documentation, including axilla when performed; complete
76642	Ultrasound, breast, unilateral, real time with image documentation, including axilla when performed; limited
76700	Ultrasound, abdominal, real time with image documentation; complete
76705	Ultrasound, abdominal, real time with image documentation; limited (eg, single organ, quadrant, follow-up)
76706	Ultrasound, abdominal aorta, real time with image documentation, screening study for abdominal aortic aneurysm (AAA)
76770	Ultrasound, retroperitoneal (eg, renal, aorta, nodes), real time with image documentation; complete
76775	Ultrasound, retroperitoneal (eg, renal, aorta, nodes), real time with image documentation; limited
76776	Ultrasound, transplanted kidney, real time and duplex Doppler with image documentation
76800	Ultrasound, spinal canal and contents
76801	Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, first trimester (< 14 weeks 0 days), transabdominal approach; single or first gestation
76802	Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, first trimester (< 14 weeks 0 days), transabdominal approach; each additional gestation (List separately in addition to code for primary procedure)
76805	Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, after first trimester (> or = 14 weeks 0 days), transabdominal approach; single or first gestation

A-1 Radiology	
Code	**Code Description**
76810	Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation, after first trimester (> or = 14 weeks 0 days), transabdominal approach; each additional gestation (List separately in addition to code for primary procedure)
76811	Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation plus detailed fetal anatomic examination, transabdominal approach; single or first gestation
76812	Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation plus detailed fetal anatomic examination, transabdominal approach; each additional gestation (List separately in addition to code for primary procedure)
76813	Ultrasound, pregnant uterus, real time with image documentation, first trimester fetal nuchal translucency measurement, transabdominal or transvaginal approach; single or first gestation
76814	Ultrasound, pregnant uterus, real time with image documentation, first trimester fetal nuchal translucency measurement, transabdominal or transvaginal approach; each additional gestation (List separately in addition to code for primary procedure)
76815	Ultrasound, pregnant uterus, real time with image documentation, limited (eg, fetal heart beat, placental location, fetal position and/or qualitative amniotic fluid volume), 1 or more fetuses
76816	Ultrasound, pregnant uterus, real time with image documentation, follow-up (eg, re-evaluation of fetal size by measuring standard growth parameters and amniotic fluid volume, re-evaluation of organ system(s) suspected or confirmed to be abnormal on a previous scan), transabdominal approach, per fetus
76817	Ultrasound, pregnant uterus, real time with image documentation, transvaginal
76818	Fetal biophysical profile; with non-stress testing
76819	Fetal biophysical profile; without non-stress testing
76820	Doppler velocimetry, fetal; umbilical artery
76821	Doppler velocimetry, fetal; middle cerebral artery
76825	Echocardiography, fetal, cardiovascular system, real time with image documentation (2D), with or without M-mode recording;
76826	Echocardiography, fetal, cardiovascular system, real time with image documentation (2D), with or without M-mode recording; follow-up or repeat study
76827	Doppler echocardiography, fetal, pulsed wave and/or continuous wave with spectral display; complete
76828	Doppler echocardiography, fetal, pulsed wave and/or continuous wave with spectral display; follow-up or repeat study
76830	Ultrasound, transvaginal
76831	Saline infusion sonohysterography (SIS), including color flow Doppler, when performed
76856	Ultrasound, pelvic (nonobstetric), real time with image documentation; complete
76857	Ultrasound, pelvic (nonobstetric), real time with image documentation; limited or follow-up (eg, for follicles)
76870	Ultrasound, scrotum and contents
76872	Ultrasound, transrectal;
76881	Ultrasound, extremity, nonvascular, real-time with image documentation; complete
76882	Ultrasound, extremity, nonvascular, real-time with image documentation; limited, anatomic specific
76885	Ultrasound, infant hips, real time with imaging documentation; dynamic (requiring physician or other qualified health care professional manipulation)
76886	Ultrasound, infant hips, real time with imaging documentation; limited, static (not requiring physician or other qualified health care professional manipulation)
76970	Ultrasound study follow-up (specify)

A-1 Radiology	
Code	**Code Description**
76975	Gastrointestinal endoscopic ultrasound, supervision and interpretation
76999	Unlisted ultrasound procedure (eg, diagnostic, interventional)
77021	Magnetic resonance guidance for needle placement (eg, for biopsy, needle aspiration, injection, or placement of localization device) radiological supervision and interpretation
77022	Magnetic resonance guidance for, and monitoring of, parenchymal tissue ablation
77058	Magnetic resonance imaging, breast, without and/or with contrast material(s); unilateral
77059	Magnetic resonance imaging, breast, without and/or with contrast material(s); bilateral
77078	Computed tomography, bone mineral density study, 1 or more sites, axial skeleton (eg, hips, pelvis, spine)
77084	Magnetic resonance (eg, proton) imaging, bone marrow blood supply
78012	Thyroid uptake, single or multiple quantitative measurement(s) (including stimulation, suppression, or discharge, when performed)
78013	Thyroid imaging (including vascular flow, when performed);
78014	Thyroid imaging (including vascular flow, when performed); with single or multiple uptake(s) quantitative measurement(s) (including stimulation, suppression, or discharge, when performed)
78015	Thyroid carcinoma metastases imaging; limited area (eg, neck and chest only)
78016	Thyroid carcinoma metastases imaging; with additional studies (eg, urinary recovery)
78018	Thyroid carcinoma metastases imaging; whole body
78020	Thyroid carcinoma metastases uptake (List separately in addition to code for primary procedure)
78070	Parathyroid planar imaging (including subtraction, when performed);
78071	Parathyroid planar imaging (including subtraction, when performed); with tomographic (SPECT)
78072	Parathyroid planar imaging (including subtraction, when performed); with tomographic (SPECT), and concurrently acquired computed tomography (CT) for anatomical localization
78075	Adrenal imaging, cortex and/or medulla
78102	Bone marrow imaging; limited area
78103	Bone marrow imaging; multiple areas
78104	Bone marrow imaging; whole body
78140	Labeled red cell sequestration, differential organ/tissue (eg, splenic and/or hepatic)
78185	Spleen imaging only, with or without vascular flow
78195	Lymphatics and lymph nodes imaging
78201	Liver imaging; static only
78202	Liver imaging; with vascular flow
78205	Liver imaging (SPECT);
78206	Liver imaging (SPECT); with vascular flow
78215	Liver and spleen imaging; static only
78216	Liver and spleen imaging; with vascular flow
78226	Hepatobiliary system imaging, including gallbladder when present;
78227	Hepatobiliary system imaging, including gallbladder when present; with pharmacologic intervention, including quantitative measurement(s) when performed
78230	Salivary gland imaging;
78231	Salivary gland imaging; with serial images
78232	Salivary gland function study
78258	Esophageal motility

A-1 Radiology	
Code	**Code Description**
78261	Gastric mucosa imaging
78262	Gastroesophageal reflux study
78264	Gastric emptying imaging study (eg, solid, liquid, or both);
78265	Gastric emptying imaging study (eg, solid, liquid, or both); with small bowel transit
78266	Gastric emptying imaging study (eg, solid, liquid, or both); with small bowel and colon transit, multiple days
78278	Acute gastrointestinal blood loss imaging
78290	Intestine imaging (eg, ectopic gastric mucosa, Meckel's localization, volvulus)
78291	Peritoneal-venous shunt patency test (eg, for LeVeen, Denver shunt)
78300	Bone and/or joint imaging; limited area
78305	Bone and/or joint imaging; multiple areas
78306	Bone and/or joint imaging; whole body
78315	Bone and/or joint imaging; 3 phase study
78320	Bone and/or joint imaging; tomographic (SPECT)
78414	Determination of central c-v hemodynamics (non-imaging) (eg, ejection fraction with probe technique) with or without pharmacologic intervention or exercise, single or multiple determinations
78428	Cardiac shunt detection
78445	Non-cardiac vascular flow imaging (ie, angiography, venography)
78457	Venous thrombosis imaging, venogram; unilateral
78458	Venous thrombosis imaging, venogram; bilateral
78459	Myocardial imaging, positron emission tomography (PET), metabolic evaluation
78466	Myocardial imaging, infarct avid, planar; qualitative or quantitative
78468	Myocardial imaging, infarct avid, planar; with ejection fraction by first pass technique
78469	Myocardial imaging, infarct avid, planar; tomographic SPECT with or without quantification
78472	Cardiac blood pool imaging, gated equilibrium; planar, single study at rest or stress (exercise and/or pharmacologic), wall motion study plus ejection fraction, with or without additional quantitative processing
78473	Cardiac blood pool imaging, gated equilibrium; multiple studies, wall motion study plus ejection fraction, at rest and stress (exercise and/or pharmacologic), with or without additional quantification
78481	Cardiac blood pool imaging (planar), first pass technique; single study, at rest or with stress (exercise and/or pharmacologic), wall motion study plus ejection fraction, with or without quantification
78483	Cardiac blood pool imaging (planar), first pass technique; multiple studies, at rest and with stress (exercise and/or pharmacologic), wall motion study plus ejection fraction, with or without quantification
78491	Myocardial imaging, positron emission tomography (PET), perfusion; single study at rest or stress
78492	Myocardial imaging, positron emission tomography (PET), perfusion; multiple studies at rest and/or stress
78494	Cardiac blood pool imaging, gated equilibrium, SPECT, at rest, wall motion study plus ejection fraction, with or without quantitative processing
78496	Cardiac blood pool imaging, gated equilibrium, single study, at rest, with right ventricular ejection fraction by first pass technique (List separately in addition to code for primary procedure)
78499	Unlisted cardiovascular procedure, diagnostic nuclear medicine
78579	Pulmonary ventilation imaging (eg, aerosol or gas)
78580	Pulmonary perfusion imaging (eg, particulate)
78582	Pulmonary ventilation (eg, aerosol or gas) and perfusion imaging

A-1 Radiology	
Code	**Code Description**
78585	Pulmonary perfusion imaging, particulate, with ventilation; rebreathing and washout, with or without single breath
78597	Quantitative differential pulmonary perfusion, including imaging when performed
78598	Quantitative differential pulmonary perfusion and ventilation (eg, aerosol or gas), including imaging when performed
78600	Brain imaging, less than 4 static views;
78601	Brain imaging, less than 4 static views; with vascular flow
78605	Brain imaging, minimum 4 static views;
78606	Brain imaging, minimum 4 static views; with vascular flow
78607	Brain imaging, tomographic (SPECT)
78608	Brain imaging, positron emission tomography (PET); metabolic evaluation
78609	Brain imaging, positron emission tomography (PET); perfusion evaluation
78610	Brain imaging, vascular flow only
78630	Cerebrospinal fluid flow, imaging (not including introduction of material); cisternography
78635	Cerebrospinal fluid flow, imaging (not including introduction of material); ventriculography
78645	Cerebrospinal fluid flow, imaging (not including introduction of material); shunt evaluation
78647	Cerebrospinal fluid flow, imaging (not including introduction of material); tomographic (SPECT)
78650	Cerebrospinal fluid leakage detection and localization
78660	Radiopharmaceutical dacryocystography
78699	Unlisted nervous system procedure, diagnostic nuclear medicine
78700	Kidney imaging morphology;
78701	Kidney imaging morphology; with vascular flow
78707	Kidney imaging morphology; with vascular flow and function, single study without pharmacological intervention
78708	Kidney imaging morphology; with vascular flow and function, single study, with pharmacological intervention (eg, angiotensin converting enzyme inhibitor and/or diuretic)
78709	Kidney imaging morphology; with vascular flow and function, multiple studies, with and without pharmacological intervention (eg, angiotensin converting enzyme inhibitor and/or diuretic)
78710	Kidney imaging morphology; tomographic (SPECT)
78725	Kidney function study, non-imaging radioisotopic study
78730	Urinary bladder residual study (List separately in addition to code for primary procedure)
78740	Ureteral reflux study (radiopharmaceutical voiding cystogram)
78761	Testicular imaging with vascular flow
78800	Radiopharmaceutical localization of tumor or distribution of radiopharmaceutical agent(s); limited area
78801	Radiopharmaceutical localization of tumor or distribution of radiopharmaceutical agent(s); multiple areas
78802	Radiopharmaceutical localization of tumor or distribution of radiopharmaceutical agent(s); whole body, single day imaging
78803	Radiopharmaceutical localization of tumor or distribution of radiopharmaceutical agent(s); tomographic (SPECT)
78804	Radiopharmaceutical localization of tumor or distribution of radiopharmaceutical agent(s); whole body, requiring 2 or more days imaging
78805	Radiopharmaceutical localization of inflammatory process; limited area

A-1 Radiology	
Code	**Code Description**
78806	Radiopharmaceutical localization of inflammatory process; whole body
78807	Radiopharmaceutical localization of inflammatory process; tomographic (SPECT)
78811	Positron emission tomography (PET) imaging; limited area (eg, chest, head/neck)
78812	Positron emission tomography (PET) imaging; skull base to mid-thigh
78813	Positron emission tomography (PET) imaging; whole body
78814	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; limited area (eg, chest, head/neck)
78815	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; skull base to mid-thigh
78816	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; whole body
93880	Duplex scan of extracranial arteries; complete bilateral study
93882	Duplex scan of extracranial arteries; unilateral or limited study
93886	Transcranial Doppler study of the intracranial arteries; complete study
93888	Transcranial Doppler study of the intracranial arteries; limited study
93890	Transcranial Doppler study of the intracranial arteries; vasoreactivity study
93892	Transcranial Doppler study of the intracranial arteries; emboli detection without intravenous microbubble injection
93893	Transcranial Doppler study of the intracranial arteries; emboli detection with intravenous microbubble injection
93922	Limited bilateral noninvasive physiologic studies of upper or lower extremity arteries, (eg, for lower extremity: ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus bidirectional, Doppler waveform recording and analysis at 1-2 levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus volume plethysmography at 1-2 levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries with, transcutaneous oxygen tension measurement at 1-2 levels)
93923	Complete bilateral noninvasive physiologic studies of upper or lower extremity arteries, 3 or more levels (eg, for lower extremity: ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus segmental blood pressure measurements with bidirectional Doppler waveform recording and analysis, at 3 or more levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus segmental volume plethysmography at 3 or more levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus segmental transcutaneous oxygen tension measurements at 3 or more levels), or single level study with provocative functional maneuvers (eg, measurements with postural provocative tests, or measurements with reactive hyperemia)
93924	Noninvasive physiologic studies of lower extremity arteries, at rest and following treadmill stress testing, (ie, bidirectional Doppler waveform or volume plethysmography recording and analysis at rest with ankle/brachial indices immediately after and at timed intervals following performance of a standardized protocol on a motorized treadmill plus recording of time of onset of claudication or other symptoms, maximal walking time, and time to recovery) complete bilateral study
93925	Duplex scan of lower extremity arteries or arterial bypass grafts; complete bilateral study
93926	Duplex scan of lower extremity arteries or arterial bypass grafts; unilateral or limited study
93930	Duplex scan of upper extremity arteries or arterial bypass grafts; complete bilateral study
93931	Duplex scan of upper extremity arteries or arterial bypass grafts; unilateral or limited study

A-1 Radiology	
Code	**Code Description**
93965	Noninvasive physiologic studies of extremity veins, complete bilateral study (eg, Doppler waveform analysis with responses to compression and other maneuvers, phleborheography, impedance plethysmography)
93970	Duplex scan of extremity veins including responses to compression and other maneuvers; complete bilateral study
93971	Duplex scan of extremity veins including responses to compression and other maneuvers; unilateral or limited study
93975	Duplex scan of arterial inflow and venous outflow of abdominal, pelvic, scrotal contents and/or retroperitoneal organs; complete study
93976	Duplex scan of arterial inflow and venous outflow of abdominal, pelvic, scrotal contents and/or retroperitoneal organs; limited study
93978	Duplex scan of aorta, inferior vena cava, iliac vasculature, or bypass grafts; complete study
93979	Duplex scan of aorta, inferior vena cava, iliac vasculature, or bypass grafts; unilateral or limited study
93980	Duplex scan of arterial inflow and venous outflow of penile vessels; complete study
93981	Duplex scan of arterial inflow and venous outflow of penile vessels; follow-up or limited study
93990	Duplex scan of hemodialysis access (including arterial inflow, body of access and venous outflow)
93998	Unlisted noninvasive vascular diagnostic study
0042T	Cerebral perfusion analysis using computed tomography with contrast administration, including post-processing of parametric maps with determination of cerebral blood flow, cerebral blood volume, and mean transit time
0159T	Computer-aided detection, including computer algorithm analysis of MRI image data for lesion detection/characterization, pharmacokinetic analysis, with further physician review for interpretation, breast MRI (List separately in addition to code for primary procedure)
0398T	Magnetic resonance image guided high intensity focused ultrasound (MRgFUS), stereotactic ablation lesion, intracranial for movement disorder including stereotactic navigation and frame placement when performed
C8900	Magnetic resonance angiography with contrast, abdomen
C8901	Magnetic resonance angiography without contrast, abdomen
C8902	Magnetic resonance angiography without contrast followed by with contrast, abdomen
C8903	Magnetic resonance imaging with contrast, breast; unilateral
C8904	Magnetic resonance imaging without contrast, breast; unilateral
C8905	Magnetic resonance imaging without contrast followed by with contrast, breast; unilateral
C8906	Magnetic resonance imaging with contrast, breast; bilateral
C8907	Magnetic resonance imaging without contrast, breast; bilateral
C8908	Magnetic resonance imaging without contrast followed by with contrast, breast; bilateral
C8909	Magnetic resonance angiography with contrast, chest (excluding myocardium)
C8910	Magnetic resonance angiography without contrast, chest (excluding myocardium)
C8911	Magnetic resonance angiography without contrast followed by with contrast, chest (excluding myocardium)
C8912	Magnetic resonance angiography with contrast, lower extremity
C8913	Magnetic resonance angiography without contrast, lower extremity
C8914	Magnetic resonance angiography without contrast followed by with contrast, lower extremity
C8918	Magnetic resonance angiography with contrast, pelvis
C8919	Magnetic resonance angiography without contrast, pelvis
C8920	Magnetic resonance angiography without contrast followed by with contrast, pelvis

A-1 Radiology	
Code	**Code Description**
C8931	Magnetic resonance angiography with contrast, spinal canal and contents
C8932	Magnetic resonance angiography without contrast, spinal canal and contents
C8933	Magnetic resonance angiography without contrast followed by with contrast, spinal canal and contents
C8934	Magnetic resonance angiography with contrast, upper extremity
C8935	Magnetic resonance angiography without contrast, upper extremity
C8936	Magnetic resonance angiography without contrast followed by with contrast, upper extremity
G0219	Pet imaging whole body; melanoma for non-covered indications
G0235	Pet imaging, any site, not otherwise specified
G0252	Pet imaging, full and partial-ring PET scanners only, for initial diagnosis of breast cancer and/or surgical planning for breast cancer (e.g., initial staging of axillary lymph nodes)
G0297	Low dose ct scan (ldct) for lung cancer screening
G0389	Ultrasound b-scan and/or real time with image documentation; for abdominal aortic aneurysm (aaa) screening
S8037	Magnetic resonance cholangiopancreatography (mrcp)
S8042	Magnetic resonance imaging (mri), low-field
S8080	Scintimammography (radioimmunoscintigraphy of the breast), unilateral, including supply of radiopharmaceutical
S8085	Fluorine-18 fluorodeoxyglucose (F-18 fdg) imaging using dual-head coincidence detection system (non-dedicated PET scan)
S8092	Electron beam computed tomography (also known as ultrafast ct, cine ct)

A-2 Cardiology	
Code	**Code Description**
75557	Cardiac magnetic resonance imaging for morphology and function without contrast material;
75559	Cardiac magnetic resonance imaging for morphology and function without contrast material; with stress imaging
75561	Cardiac magnetic resonance imaging for morphology and function without contrast material(s), followed by contrast material(s) and further sequences;
75563	Cardiac magnetic resonance imaging for morphology and function without contrast material(s), followed by contrast material(s) and further sequences; with stress imaging
75571	Computed tomography, heart, without contrast material, with quantitative evaluation of coronary calcium
75572	Computed tomography, heart, with contrast material, for evaluation of cardiac structure and morphology (including 3D image postprocessing, assessment of cardiac function, and evaluation of venous structures, if performed)
75573	Computed tomography, heart, with contrast material, for evaluation of cardiac structure and morphology in the setting of congenital heart disease (including 3D image postprocessing, assessment of LV cardiac function, RV structure and function and evaluation of venous structures, if performed)
75574	Computed tomographic angiography, heart, coronary arteries and bypass grafts (when present), with contrast material, including 3D image postprocessing (including evaluation of cardiac structure and morphology, assessment of cardiac function, and evaluation of venous structures, if performed)
78451	Myocardial perfusion imaging, tomographic (SPECT) (including attenuation correction, qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); single study, at rest or stress (exercise or pharmacologic)
78452	Myocardial perfusion imaging, tomographic (SPECT) (including attenuation correction, qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); multiple studies, at rest and/or stress (exercise or pharmacologic) and/or redistribution and/or rest reinjection
78453	Myocardial perfusion imaging, planar (including qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); single study, at rest or stress (exercise or pharmacologic)
78454	Myocardial perfusion imaging, planar (including qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); multiple studies, at rest and/or stress (exercise or pharmacologic) and/or redistribution and/or rest reinjection
78459	Myocardial imaging, positron emission tomography (PET), metabolic evaluation
78491	Myocardial imaging, positron emission tomography (PET), perfusion; single study at rest or stress
78492	Myocardial imaging, positron emission tomography (PET), perfusion; multiple studies at rest and/or stress
93303	Transthoracic echocardiography for congenital cardiac anomalies; complete
93304	Transthoracic echocardiography for congenital cardiac anomalies; follow-up or limited study
93306	Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, complete, with spectral Doppler echocardiography, and with color flow Doppler echocardiography
93307	Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, complete, without spectral or color Doppler echocardiography
93308	Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, follow-up or limited study
93312	Echocardiography, transesophageal, real-time with image documentation (2D) (with or without M-mode recording); including probe placement, image acquisition, interpretation and report
93313	Echocardiography, transesophageal, real-time with image documentation (2D) (with or without M-mode recording); placement of transesophageal probe only

A-2 Cardiology	
Code	**Code Description**
93314	Echocardiography, transesophageal, real-time with image documentation (2D) (with or without M-mode recording); image acquisition, interpretation and report only
93315	Transesophageal echocardiography for congenital cardiac anomalies; including probe placement, image acquisition, interpretation and report
93316	Transesophageal echocardiography for congenital cardiac anomalies; placement of transesophageal probe only
93317	Transesophageal echocardiography for congenital cardiac anomalies; image acquisition, interpretation and report only
93318	Echocardiography, transesophageal (TEE) for monitoring purposes, including probe placement, real time 2-dimensional image acquisition and interpretation leading to ongoing (continuous) assessment of (dynamically changing) cardiac pumping function and to therapeutic measures on an immediate time basis
93350	Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, during rest and cardiovascular stress test using treadmill, bicycle exercise and/or pharmacologically induced stress, with interpretation and report;
93451	Right heart catheterization including measurement(s) of oxygen saturation and cardiac output, when performed
93452	Left heart catheterization including intraprocedural injection(s) for left ventriculography, imaging supervision and interpretation, when performed
93453	Combined right and left heart catheterization including intraprocedural injection(s) for left ventriculography, imaging supervision and interpretation, when performed
93454	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation;
93455	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) including intraprocedural injection(s) for bypass graft angiography
93456	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right heart catheterization
93457	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) including intraprocedural injection(s) for bypass graft angiography and right heart catheterization
93458	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed
93459	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed, catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) with bypass graft angiography
93460	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right and left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed

A-2 Cardiology	
Code	**Code Description**
93461	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right and left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed, catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) with bypass graft angiography
93530	Right heart catheterization, for congenital cardiac anomalies
93531	Combined right heart catheterization and retrograde left heart catheterization, for congenital cardiac anomalies
93532	Combined right heart catheterization and transseptal left heart catheterization through intact septum with or without retrograde left heart catheterization, for congenital cardiac anomalies
93533	Combined right heart catheterization and transseptal left heart catheterization through existing septal opening, with or without retrograde left heart catheterization, for congenital cardiac anomalies
0399T	Myocardial strain imaging (quantitative assessment of myocardial mechanics using image-based analysis of local myocardial dynamics) (List separately in addition to code for primary procedure)
C8921	Transthoracic echocardiography with contrast, or without contrast followed by with contrast, for congenital cardiac anomalies; complete
C8922	Transthoracic echocardiography with contrast, or without contrast followed by with contrast, for congenital cardiac anomalies; follow-up or limited study
C8923	Transthoracic echocardiography with contrast, or without contrast followed by with contrast, real-time with image documentation (2d), includes m-mode recording, when performed, complete, without spectral or color doppler echocardiography
C8924	Transthoracic echocardiography with contrast, or without contrast followed by with contrast, real-time with image documentation (2d), includes m-mode recording, when performed, follow-up or limited study
C8928	Transthoracic echocardiography with contrast, or without contrast followed by with contrast, real-time with image documentation (2d), includes m-mode recording, when performed, during rest and cardiovascular stress test using treadmill, bicycle exercise and/or pharmacologically induced stress, with interpretation and report
C8929	Transthoracic echocardiography with contrast, or without contrast followed by with contrast, real-time with image documentation (2d), includes m-mode recording, when performed, complete, with spectral doppler echocardiography, and with color flow doppler echocardiography
C8930	Transthoracic echocardiography, with contrast, or without contrast followed by with contrast, real-time with image documentation (2d), includes m-mode recording, when performed, during rest and cardiovascular stress test using treadmill, bicycle exercise and/or pharmacologically induced stress, with interpretation and report; including performance of continuous electrocardiographic monitoring, with physician supervision

A-3 Specialty Therapy PT-OT	
Code	**Code Description**
29105	Application of long arm splint (shoulder to hand)
29125	Application of short arm splint (forearm to hand); static
29126	Application of short arm splint (forearm to hand); dynamic
29130	Application of finger splint; static
29131	Application of finger splint; dynamic
29200	Strapping; thorax
29240	Strapping; shoulder (eg, Velpeau)
29260	Strapping; elbow or wrist
29280	Strapping; hand or finger
29520	Strapping; hip
29530	Strapping; knee
29540	Strapping; ankle and/or foot
29550	Strapping; toes
90911	Biofeedback training, perineal muscles, anorectal or urethral sphincter, including EMG and/or manometry
95831	Muscle testing, manual (separate procedure) with report; extremity (excluding hand) or trunk
95832	Muscle testing, manual (separate procedure) with report; hand, with or without comparison with normal side
95833	Muscle testing, manual (separate procedure) with report; total evaluation of body, excluding hands
95834	Muscle testing, manual (separate procedure) with report; total evaluation of body, including hands
95851	Range of motion measurements and report (separate procedure); each extremity (excluding hand) or each trunk section (spine)
95852	Range of motion measurements and report (separate procedure); hand, with or without comparison with normal side
96160	Administration of patient-focused health risk assessment instrument (eg, health hazard appraisal) with scoring and documentation, per standardized instrument
96161	Administration of caregiver-focused health risk assessment instrument (eg, depression inventory) for the benefit of the patient, with scoring and documentation, per standardized instrument
97010	Application of a modality to 1 or more areas; hot or cold packs
97012	Application of a modality to 1 or more areas; traction, mechanical
97014	Application of a modality to 1 or more areas; electrical stimulation (unattended)
97016	Application of a modality to 1 or more areas; vasopneumatic devices
97018	Application of a modality to 1 or more areas; paraffin bath
97022	Application of a modality to 1 or more areas; whirlpool
97024	Application of a modality to 1 or more areas; diathermy (eg, microwave)
97026	Application of a modality to 1 or more areas; infrared
97028	Application of a modality to 1 or more areas; ultraviolet
97032	Application of a modality to 1 or more areas; electrical stimulation (manual), each 15 minutes
97033	Application of a modality to 1 or more areas; iontophoresis, each 15 minutes
97034	Application of a modality to 1 or more areas; contrast baths, each 15 minutes
97035	Application of a modality to 1 or more areas; ultrasound, each 15 minutes
97036	Application of a modality to 1 or more areas; Hubbard tank, each 15 minutes
97039	Unlisted modality (specify type and time if constant attendance)

97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility
97112	Therapeutic procedure, 1 or more areas, each 15 minutes; neuromuscular reeducation of movement, balance, coordination, kinesthetic sense, posture, and/or proprioception for sitting and/or standing activities
97113	Therapeutic procedure, 1 or more areas, each 15 minutes; aquatic therapy with therapeutic exercises
97116	Therapeutic procedure, 1 or more areas, each 15 minutes; gait training (includes stair climbing)
97124	Therapeutic procedure, 1 or more areas, each 15 minutes; massage, including effleurage, petrissage and/or tapotement (stroking, compression, percussion)
97139	Unlisted therapeutic procedure (specify)
97140	Manual therapy techniques (eg, mobilization/ manipulation, manual lymphatic drainage, manual traction), 1 or more regions, each 15 minutes
97150	Therapeutic procedure(s), group (2 or more individuals)
97161	Physical therapy evaluation: low complexity, requiring these components: A history with no personal factors and/or comorbidities that impact the plan of care; An examination of body system(s) using standardized tests and measures addressing 1-2 elements from any of the following: body structures and functions, activity limitations, and/or participation restrictions; A clinical presentation with stable and/or uncomplicated characteristics; and Clinical decision making of low complexity using standardized patient assessment instrument and/or measurable assessment of functional outcome. Typically, 20 minutes are spent face-to-face with the patient and/or family.
97162	Physical therapy evaluation: moderate complexity, requiring these components: A history of present problem with 1-2 personal factors and/or comorbidities that impact the plan of care; An examination of body systems using standardized tests and measures in addressing a total of 3 or more elements from any of the following: body structures and functions, activity limitations, and/or participation restrictions; An evolving clinical presentation with changing characteristics; and Clinical decision making of moderate complexity using standardized patient assessment instrument and/or measurable assessment of functional outcome. Typically, 30 minutes are spent face-to-face with the patient and/or family.
97163	Physical therapy evaluation: high complexity, requiring these components: A history of present problem with 3 or more personal factors and/or comorbidities that impact the plan of care; An examination of body systems using standardized tests and measures addressing a total of 4 or more elements from any of the following: body structures and functions, activity limitations, and/or participation restrictions; A clinical presentation with unstable and unpredictable characteristics; and Clinical decision making of high complexity using standardized patient assessment instrument and/or measurable assessment of functional outcome. Typically, 45 minutes are spent face-to-face with the patient and/or family.
97164	Re-evaluation of physical therapy established plan of care, requiring these components: An examination including a review of history and use of standardized tests and measures is required; and Revised plan of care using a standardized patient assessment instrument and/or measurable assessment of functional outcome Typically, 20 minutes are spent face-to-face with the patient and/or family.
97165	Occupational therapy evaluation, low complexity, requiring these components: An occupational profile and medical and therapy history, which includes a brief history including review of medical and/or therapy records relating to the presenting problem; An assessment(s) that identifies 1-3 performance deficits (ie, relating to physical, cognitive, or psychosocial skills) that result in activity limitations and/or participation restrictions; and Clinical decision making of low complexity, which includes an analysis of the occupational profile, analysis of data from problem-focused assessment(s), and consideration of a limited number of treatment options. Patient presents with no comorbidities that affect occupational performance. Modification of tasks or assistance (eg, physical or verbal) with assessment(s) is not necessary to enable completion of evaluation component. Typically, 30 minutes are spent face-to-face with the patient and/or family.

97166	Occupational therapy evaluation, moderate complexity, requiring these components: An occupational profile and medical and therapy history, which includes an expanded review of medical and/or therapy records and additional review of physical, cognitive, or psychosocial history related to current functional performance; An assessment(s) that identifies 3-5 performance deficits (ie, relating to physical, cognitive, or psychosocial skills) that result in activity limitations and/or participation restrictions; and Clinical decision making of moderate analytic complexity, which includes an analysis of the occupational profile, analysis of data from detailed assessment(s), and consideration of several treatment options. Patient may present with comorbidities that affect occupational performance. Minimal to moderate modification of tasks or assistance (eg, physical or verbal) with assessment(s) is necessary to enable patient to complete evaluation component. Typically, 45 minutes are spent face-to-face with the patient and/or family.
97167	Occupational therapy evaluation, high complexity, requiring these components: An occupational profile and medical and therapy history, which includes review of medical and/or therapy records and extensive additional review of physical, cognitive, or psychosocial history related to current functional performance; An assessment(s) that identifies 5 or more performance deficits (ie, relating to physical, cognitive, or psychosocial skills) that result in activity limitations and/or participation restrictions; and Clinical decision making of high analytic complexity, which includes an analysis of the patient profile, analysis of data from comprehensive assessment(s), and consideration of multiple treatment options. Patient presents with comorbidities that affect occupational performance. Significant modification of tasks or assistance (eg, physical or verbal) with assessment(s) is necessary to enable patient to complete evaluation component. Typically, 60 minutes are spent face-to-face with the patient and/or family.
97168	Re-evaluation of occupational therapy established plan of care, requiring these components: An assessment of changes in patient functional or medical status with revised plan of care; An update to the initial occupational profile to reflect changes in condition or environment that affect future interventions and/or goals; and A revised plan of care. A formal reevaluation is performed when there is a documented change in functional status or a significant change to the plan of care is required. Typically, 30 minutes are spent face-to-face with the patient and/or family.
97530	Therapeutic activities, direct (one-on-one) patient contact (use of dynamic activities to improve functional performance), each 15 minutes
97532	Development of cognitive skills to improve attention, memory, problem solving (includes compensatory training), direct (one-on-one) patient contact, each 15 minutes
97533	Sensory integrative techniques to enhance sensory processing and promote adaptive responses to environmental demands, direct (one-on-one) patient contact, each 15 minutes
97535	Self-care/home management training (eg, activities of daily living (ADL) and compensatory training, meal preparation, safety procedures, and instructions in use of assistive technology devices/adaptive equipment) direct one-on-one contact, each 15 minutes
97537	Community/work reintegration training (eg, shopping, transportation, money management, avocational activities and/or work environment/modification analysis, work task analysis, use of assistive technology device/adaptive equipment), direct one-on-one contact, each 15 minutes
97542	Wheelchair management (eg, assessment, fitting, training), each 15 minutes
97545	Work hardening/conditioning; initial 2 hours
97546	Work hardening/conditioning; each additional hour (List separately in addition to code for primary procedure)
97750	Physical performance test or measurement (eg, musculoskeletal, functional capacity), with written report, each 15 minutes
97755	Assistive technology assessment (eg, to restore, augment or compensate for existing function, optimize functional tasks and/or maximize environmental accessibility), direct one-on-one contact, with written report, each 15 minutes

97760	Orthotic(s) management and training (including assessment and fitting when not otherwise reported), upper extremity(s), lower extremity(s) and/or trunk, each 15 minutes
97761	Prosthetic training, upper and/or lower extremity(s), each 15 minutes
97762	Checkout for orthotic/prosthetic use, established patient, each 15 minutes
97799	Unlisted physical medicine/rehabilitation service or procedure
G0151	Services performed by a qualified physical therapist in the home health or hospice setting, each 15 minutes
G0152	Services performed by a qualified occupational therapist in the home health or hospice setting, each 15 minutes
G0157	Services performed by a qualified physical therapist assistant in the home health or hospice setting, each 15 minutes
G0158	Services performed by a qualified occupational therapist assistant in the home health or hospice setting, each 15 minutes
G0159	Services performed by a qualified physical therapist, in the home health setting, in the establishment or delivery of a safe and effective physical therapy maintenance program, each 15 minutes
G0160	Services performed by a qualified occupational therapist, in the home health setting, in the establishment or delivery of a safe and effective occupational therapy maintenance program, each 15 minutes
G0281	Electrical stimulation, (unattended), to one or more areas, for chronic stage iii and stage iv pressure ulcers, arterial ulcers, diabetic ulcers, and venous statsis ulcers not demonstrating measurable signs of healing after 30 days of conventional care, as part of a therapy plan of care
G0282	Electrical stimulation, (unattended), to one or more areas, for wound care other than described in G0281
G0283	Electrical stimulation (unattended), to one or more areas for indication(s) other than wound care, as part of a therapy plan of care

A-3 Specialty Therapy - Speech	
Code	**Code Description**
31575	Laryngoscopy, flexible fiberoptic; diagnostic
31579	Laryngoscopy, flexible or rigid telescopic, with stroboscopy
92507	Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual
92508	Treatment of speech, language, voice, communication, and/or auditory processing disorder; group, 2 or more individuals
92511	Nasopharyngoscopy with endoscope (separate procedure)
92520	Laryngeal function studies (ie, aerodynamic testing and acoustic testing)
92521	Evaluation of speech fluency (eg, stuttering, cluttering)
92522	Evaluation of speech sound production (eg, articulation, phonological process, apraxia, dysarthria);
92523	Evaluation of speech sound production (eg, articulation, phonological process, apraxia, dysarthria); with evaluation of language comprehension and expression (eg, receptive and expressive language)
92524	Behavioral and qualitative analysis of voice and resonance
92526	Treatment of swallowing dysfunction and/or oral function for feeding
92597	Evaluation for use and/or fitting of voice prosthetic device to supplement oral speech
92605	Evaluation for prescription of non-speech-generating augmentative and alternative communication device, face-to-face with the patient; first hour
92606	Therapeutic service(s) for the use of non-speech-generating device, including programming and modification
92607	Evaluation for prescription for speech-generating augmentative and alternative communication device, face-to-face with the patient; first hour
92608	Evaluation for prescription for speech-generating augmentative and alternative communication device, face-to-face with the patient; each additional 30 minutes (List separately in addition to code for primary procedure)
92609	Therapeutic services for the use of speech-generating device, including programming and modification
92610	Evaluation of oral and pharyngeal swallowing function
92611	Motion fluoroscopic evaluation of swallowing function by cine or video recording
92612	Flexible endoscopic evaluation of swallowing by cine or video recording;
92613	Flexible endoscopic evaluation of swallowing by cine or video recording; interpretation and report only
92614	Flexible endoscopic evaluation, laryngeal sensory testing by cine or video recording;
92615	Flexible endoscopic evaluation, laryngeal sensory testing by cine or video recording; interpretation and report only
92616	Flexible endoscopic evaluation of swallowing and laryngeal sensory testing by cine or video recording;
92617	Flexible endoscopic evaluation of swallowing and laryngeal sensory testing by cine or video recording; interpretation and report only
92618	Evaluation for prescription of non-speech-generating augmentative and alternative communication device, face-to-face with the patient; each additional 30 minutes (List separately in addition to code for primary procedure)
96105*	Assessment of aphasia (includes assessment of expressive and receptive speech and language function, language comprehension, speech production ability, reading, spelling, writing, eg, by Boston Diagnostic Aphasia Examination) with interpretation and report, per hour
96110	Developmental screening (eg, developmental milestone survey, speech and language delay screen), with scoring and documentation, per standardized instrument
96111	Developmental testing, (includes assessment of motor, language, social, adaptive, and/or cognitive functioning by standardized developmental instruments) with interpretation and report

A-3 Specialty Therapy - Speech	
Code	**Code Description**
96125*	Standardized cognitive performance testing (eg, Ross Information Processing Assessment) per hour of a qualified health care professional's time, both face-to-face time administering tests to the patient and time interpreting these test results and preparing the report
97532	Development of cognitive skills to improve attention, memory, problem solving (includes compensatory training), direct (one-on-one) patient contact, each 15 minutes

* For non-behavioral health diagnosis only

A-3 Specialty Therapy - Chiro	
Code	**Code Description**
95831	Muscle testing, manual (separate procedure) with report; extremity (excluding hand) or trunk
95832	Muscle testing, manual (separate procedure) with report; hand, with or without comparison with normal side
95833	Muscle testing, manual (separate procedure) with report; total evaluation of body, excluding hands
95834	Muscle testing, manual (separate procedure) with report; total evaluation of body, including hands
95851	Range of motion measurements and report (separate procedure); each extremity (excluding hand) or each trunk section (spine)
95852	Range of motion measurements and report (separate procedure); hand, with or without comparison with normal side
97010	Application of a modality to 1 or more areas; hot or cold packs
97012	Application of a modality to 1 or more areas; traction, mechanical
97014	Application of a modality to 1 or more areas; electrical stimulation (unattended)
97016	Application of a modality to 1 or more areas; vasopneumatic devices
97018	Application of a modality to 1 or more areas; paraffin bath
97022	Application of a modality to 1 or more areas; whirlpool
97024	Application of a modality to 1 or more areas; diathermy (eg, microwave)
97026	Application of a modality to 1 or more areas; infrared
97028	Application of a modality to 1 or more areas; ultraviolet
97032	Application of a modality to 1 or more areas; electrical stimulation (manual), each 15 minutes
97033	Application of a modality to 1 or more areas; iontophoresis, each 15 minutes
97034	Application of a modality to 1 or more areas; contrast baths, each 15 minutes
97035	Application of a modality to 1 or more areas; ultrasound, each 15 minutes
97036	Application of a modality to 1 or more areas; Hubbard tank, each 15 minutes
97039	Unlisted modality (specify type and time if constant attendance)
97110	Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility
97112	Therapeutic procedure, 1 or more areas, each 15 minutes; neuromuscular reeducation of movement, balance, coordination, kinesthetic sense, posture, and/or proprioception for sitting and/or standing activities
97116	Therapeutic procedure, 1 or more areas, each 15 minutes; gait training (includes stair climbing)
97140	Manual therapy techniques (eg, mobilization/ manipulation, manual lymphatic drainage, manual traction), 1 or more regions, each 15 minutes
97530	Therapeutic activities, direct (one-on-one) patient contact (use of dynamic activities to improve functional performance), each 15 minutes
97760	Orthotic(s) management and training (including assessment and fitting when not otherwise reported), upper extremity(s), lower extremity(s) and/or trunk, each 15 minutes
97761	Prosthetic training, upper and/or lower extremity(s), each 15 minutes
97762	Checkout for orthotic/prosthetic use, established patient, each 15 minutes
98942	Chiropractic manipulative treatment (CMT); spinal, 5 regions
98943	Chiropractic manipulative treatment (CMT); extraspinal, 1 or more regions
97750	Physical performance test or measurement (eg, musculoskeletal, functional capacity), with written report, each 15 minutes
98940	Chiropractic manipulative treatment (CMT); spinal, 1-2 regions
98941	Chiropractic manipulative treatment (CMT); spinal, 3-4 regions

A-3 Specialty Therapy - Chiro	
Code	**Code Description**
G0283	Electrical stimulation (unattended), to one or more areas for indication(s) other than wound care, as part of a therapy plan of care

A-4 Musculoskeletal - Joint	
Code	**Code Description**
23000	Removal of subdeltoid calcareous deposits, open
23020	Capsular contracture release (eg, Sever type procedure)
23120	Claviculectomy; partial
23130	Acromioplasty or acromionectomy, partial, with or without coracoacromial ligament release
23410	Repair of ruptured musculotendinous cuff (eg, rotator cuff) open; acute
23412	Repair of ruptured musculotendinous cuff (eg, rotator cuff) open; chronic
23415	Coracoacromial ligament release, with or without acromioplasty
23420	Reconstruction of complete shoulder (rotator) cuff avulsion, chronic (includes acromioplasty)
23430	Tenodesis of long tendon of biceps
23440	Resection or transplantation of long tendon of biceps
23450	Capsulorrhaphy, anterior; Putti-Platt procedure or Magnuson type operation
23455	Capsulorrhaphy, anterior; with labral repair (eg, Bankart procedure)
23460	Capsulorrhaphy, anterior, any type; with bone block
23462	Capsulorrhaphy, anterior, any type; with coracoid process transfer
23465	Capsulorrhaphy, glenohumeral joint, posterior, with or without bone block
23466	Capsulorrhaphy, glenohumeral joint, any type multi-directional instability
23470	Arthroplasty, glenohumeral joint; hemiarthroplasty
23472	Arthroplasty, glenohumeral joint; total shoulder (glenoid and proximal humeral replacement (eg, total shoulder))
23473	Revision of total shoulder arthroplasty, including allograft when performed; humeral or glenoid component
23474	Revision of total shoulder arthroplasty, including allograft when performed; humeral and glenoid component
27125	Hemiarthroplasty, hip, partial (eg, femoral stem prosthesis, bipolar arthroplasty)
27130	Arthroplasty, acetabular and proximal femoral prosthetic replacement (total hip arthroplasty), with or without autograft or allograft
27132	Conversion of previous hip surgery to total hip arthroplasty, with or without autograft or allograft
27134	Revision of total hip arthroplasty; both components, with or without autograft or allograft
27137	Revision of total hip arthroplasty; acetabular component only, with or without autograft or allograft
27138	Revision of total hip arthroplasty; femoral component only, with or without allograft
27332	Arthrotomy, with excision of semilunar cartilage (meniscectomy) knee; medial OR lateral
27333	Arthrotomy, with excision of semilunar cartilage (meniscectomy) knee; medial AND lateral
27334	Arthrotomy, with synovectomy, knee; anterior OR posterior
27335	Arthrotomy, with synovectomy, knee; anterior AND posterior including popliteal area
27403	Arthrotomy with meniscus repair, knee
27412	Autologous chondrocyte implantation, knee
27415	Osteochondral allograft, knee, open
27416	Osteochondral autograft(s), knee, open (eg, mosaicplasty) (includes harvesting of autograft[s])
27418	Anterior tibial tubercleplasty (eg, Maquet type procedure)
27420	Reconstruction of dislocating patella; (eg, Hauser type procedure)
27422	Reconstruction of dislocating patella; with extensor realignment and/or muscle advancement or release (eg, Campbell, Goldwaite type procedure)
27424	Reconstruction of dislocating patella; with patellectomy
27425	Lateral retinacular release, open

A-4 Musculoskeletal - Joint	
Code	**Code Description**
27427	Ligamentous reconstruction (augmentation), knee; extra-articular
27428	Ligamentous reconstruction (augmentation), knee; intra-articular (open)
27429	Ligamentous reconstruction (augmentation), knee; intra-articular (open) and extra-articular
27430	Quadricepsplasty (eg, Bennett or Thompson type)
27438	Arthroplasty, patella; with prosthesis
27440	Arthroplasty, knee, tibial plateau;
27441	Arthroplasty, knee, tibial plateau; with debridement and partial synovectomy
27442	Arthroplasty, femoral condyles or tibial plateau(s), knee;
27443	Arthroplasty, femoral condyles or tibial plateau(s), knee; with debridement and partial synovectomy
27446	Arthroplasty, knee, condyle and plateau; medial OR lateral compartment
27447	Arthroplasty, knee, condyle and plateau; medial AND lateral compartments with or without patella resurfacing (total knee arthroplasty)
27486	Revision of total knee arthroplasty, with or without allograft; 1 component
27487	Revision of total knee arthroplasty, with or without allograft; femoral and entire tibial component
29805	Arthroscopy, shoulder, diagnostic, with or without synovial biopsy (separate procedure)
29806	Arthroscopy, shoulder, surgical; capsulorrhaphy
29807	Arthroscopy, shoulder, surgical; repair of SLAP lesion
29819	Arthroscopy, shoulder, surgical; with removal of loose body or foreign body
29820	Arthroscopy, shoulder, surgical; synovectomy, partial
29821	Arthroscopy, shoulder, surgical; synovectomy, complete
29822	Arthroscopy, shoulder, surgical; debridement, limited
29823	Arthroscopy, shoulder, surgical; debridement, extensive
29824	Arthroscopy, shoulder, surgical; distal claviculectomy including distal articular surface (Mumford procedure)
29825	Arthroscopy, shoulder, surgical; with lysis and resection of adhesions, with or without manipulation
29827	Arthroscopy, shoulder, surgical; with rotator cuff repair
29828	Arthroscopy, shoulder, surgical; biceps tenodesis
29860	Arthroscopy, hip, diagnostic with or without synovial biopsy (separate procedure)
29861	Arthroscopy, hip, surgical; with removal of loose body or foreign body
29862	Arthroscopy, hip, surgical; with debridement/shaving of articular cartilage (chondroplasty), abrasion arthroplasty, and/or resection of labrum
29863	Arthroscopy, hip, surgical; with synovectomy
29866	Arthroscopy, knee, surgical; osteochondral autograft(s) (eg, mosaicplasty) (includes harvesting of the autograft[s])
29867	Arthroscopy, knee, surgical; osteochondral allograft (eg, mosaicplasty)
29868	Arthroscopy, knee, surgical; meniscal transplantation (includes arthrotomy for meniscal insertion), medial or lateral
29870	Arthroscopy, knee, diagnostic, with or without synovial biopsy (separate procedure)
29871	Arthroscopy, knee, surgical; for infection, lavage and drainage
29873	Arthroscopy, knee, surgical; with lateral release
29874	Arthroscopy, knee, surgical; for removal of loose body or foreign body (eg, osteochondritis dissecans fragmentation, chondral fragmentation)
29875	Arthroscopy, knee, surgical; synovectomy, limited (eg, plica or shelf resection) (separate procedure)
29876	Arthroscopy, knee, surgical; synovectomy, major, 2 or more compartments (eg, medial or lateral)

A-4 Musculoskeletal - Joint	
Code	**Code Description**
29877	Arthroscopy, knee, surgical; debridement/shaving of articular cartilage (chondroplasty)
29879	Arthroscopy, knee, surgical; abrasion arthroplasty (includes chondroplasty where necessary) or multiple drilling or microfracture
29880	Arthroscopy, knee, surgical; with meniscectomy (medial AND lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed
29881	Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed
29882	Arthroscopy, knee, surgical; with meniscus repair (medial OR lateral)
29883	Arthroscopy, knee, surgical; with meniscus repair (medial AND lateral)
29884	Arthroscopy, knee, surgical; with lysis of adhesions, with or without manipulation (separate procedure)
29885	Arthroscopy, knee, surgical; drilling for osteochondritis dissecans with bone grafting, with or without internal fixation (including debridement of base of lesion)
29886	Arthroscopy, knee, surgical; drilling for intact osteochondritis dissecans lesion
29887	Arthroscopy, knee, surgical; drilling for intact osteochondritis dissecans lesion with internal fixation
29888	Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction
29889	Arthroscopically aided posterior cruciate ligament repair/augmentation or reconstruction
29914	Arthroscopy, hip, surgical; with femoroplasty (ie, treatment of cam lesion)
29915	Arthroscopy, hip, surgical; with acetabuloplasty (ie, treatment of pincer lesion)
29916	Arthroscopy, hip, surgical; with labral repair

A-4 Musculoskeletal - Spine	
Code	**Code Description**
20930	Allograft, morselized, or placement of osteopromotive material, for spine surgery only (List separately in addition to code for primary procedure)
20931	Allograft, structural, for spine surgery only (List separately in addition to code for primary procedure)
20936	Autograft for spine surgery only (includes harvesting the graft); local (eg, ribs, spinous process, or laminar fragments) obtained from same incision (List separately in addition to code for primary procedure)
20937	Autograft for spine surgery only (includes harvesting the graft); morselized (through separate skin or fascial incision) (List separately in addition to code for primary procedure)
20938	Autograft for spine surgery only (includes harvesting the graft); structural, bicortical or tricortical (through separate skin or fascial incision) (List separately in addition to code for primary procedure)
20974	Electrical stimulation to aid bone healing; noninvasive (non-operative)
20975	Electrical stimulation to aid bone healing; noninvasive (operative)
22510	Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection, inclusive of all imaging guidance; cervicothoracic
22511	Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection, inclusive of all imaging guidance; lumbosacral
22512	Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection, inclusive of all imaging guidance; each additional cervicothoracic or lumbosacral vertebral body (List separately in addition to code for primary procedure)
22513	Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device (eg, kyphoplasty), 1 vertebral body, unilateral or bilateral cannulation, inclusive of all imaging guidance; thoracic
22514	Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device (eg, kyphoplasty), 1 vertebral body, unilateral or bilateral cannulation, inclusive of all imaging guidance; lumbar
22515	Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device (eg, kyphoplasty), 1 vertebral body, unilateral or bilateral cannulation, inclusive of all imaging guidance; each additional thoracic or lumbar vertebral body (List separately in addition to code for primary procedure)
22533	Arthrodesis, lateral eXtracavitary technique, including minimal discectomy to prepare interspace (other than for decompression); lumbar
22534	Arthrodesis, lateral extracavitary technique, including minimal discectomy to prepare interspace (other than for decompression); thoracic or lumbar, each additional vertebral segment (List separately in addition to code for primary procedure)
22551	Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophytectomy and decompression of spinal cord and/or nerve roots; cervical below C2
22552	Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophytectomy and decompression of spinal cord and/or nerve roots; cervical below C2, each additional interspace (List separately in addition to code for separate procedure)
22554	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); cervical below C2
22558	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); lumbar
22585	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); each additional interspace (List separately in addition to code for primary procedure)
22600	Arthrodesis, posterior or posterolateral technique, single level; cervical below C2 segment

A-4 Musculoskeletal - Spine	
Code	**Code Description**
22612	Arthrodesis, posterior or posterolateral technique, single level; lumbar (with lateral transverse technique, when performed)
22614	Arthrodesis, posterior or posterolateral technique, single level; each additional vertebral segment (List separately in addition to code for primary procedure)
22630	Arthrodesis, posterior interbody technique, including laminectomy and/or discectomy to prepare interspace (other than for decompression), single interspace; lumbar
22632	Arthrodesis, posterior interbody technique, including laminectomy and/or discectomy to prepare interspace (other than for decompression), single interspace; each additional interspace (List separately in addition to code for primary procedure)
22633	Arthrodesis, combined posterior or posterolateral technique with posterior interbody technique including laminectomy and/or discectomy sufficient to prepare interspace (other than for decompression), single interspace and segment; lumbar
22634	Arthrodesis, combined posterior or posterolateral technique with posterior interbody technique including laminectomy and/or discectomy sufficient to prepare interspace (other than for decompression), single interspace and segment; each additional interspace and segment (List separately in addition to code for primary procedure)
22841	Internal spinal fixation by wiring of spinous processes (List separately in addition to code for primary procedure)
22842	Posterior segmental instrumentation (eg, pedicle fixation, dual rods with multiple hooks and sublaminar wires); 3 to 6 vertebral segments (List separately in addition to code for primary procedure)
22843	Posterior segmental instrumentation (eg, pedicle fixation, dual rods with multiple hooks and sublaminar wires); 7 to 12 vertebral segments (List separately in addition to code for primary procedure)
22844	Posterior segmental instrumentation (eg, pedicle fixation, dual rods with multiple hooks and sublaminar wires); 13 or more vertebral segments (List separately in addition to code for primary procedure)
22845	Anterior instrumentation; 2 to 3 vertebral segments (List separately in addition to code for primary procedure)
22846	Anterior instrumentation; 4 to 7 vertebral segments (List separately in addition to code for primary procedure)
22847	Anterior instrumentation; 8 or more vertebral segments (List separately in addition to code for primary procedure)
22848	Pelvic fixation (attachment of caudal end of instrumentation to pelvic bony structures) other than sacrum (List separately in addition to code for primary procedure)
22853	Insertion of interbody biomechanical device(s) (eg, synthetic cage, mesh) with integral anterior instrumentation for device anchoring (eg, screws, flanges), when conjunction with interbody arthrodesis, each interspace (List performed, to intervertebral disc space in conjunction with interbody arthrodesis, each interspace (List separately in addition to code for primary procedure)
22854	Insertion of intervertebral biomechanical device(s) (eg, synthetic cage, mesh) with integral anterior instrumentation for device anchoring (eg, screws, flanges), when performed, to vertebral corpectomy(ies) (vertebral body resection, partial or complete) defect, in conjunction with interbody arthrodesis, each contiguous defect (List separately in addition to code for primary procedure)
22856	Total disc arthroplasty (artificial disc), anterior approach, including discectomy with end plate preparation (includes osteophytectomy for nerve root or spinal cord decompression and microdissection); single interspace, cervical
22857	Total disc arthroplasty (artificial disc), anterior approach, including discectomy to prepare interspace (other than for decompression), single interspace, lumbar

A-4 Musculoskeletal - Spine	
Code	**Code Description**
22858	Total disc arthroplasty (artificial disc), anterior approach, including discectomy with end plate preparation (includes osteophytectomy for nerve root or spinal cord decompression and microdissection); second level, cervical (List separately in addition to code for primary procedure)
22859	Insertion of intervertebral biomechanical device(s) (eg, synthetic cage, mesh, methylmethacrylate) to intervertebral disc space or vertebral body defect without interbody arthrodesis, each contiguous efect (List separately in addition to code for primary procedure)
22861	Revision including replacement of total disc arthroplasty (artificial disc), anterior approach, single interspace; cervical
22862	Revision including replacement of total disc arthroplasty (artificial disc), anterior approach, single interspace; lumbar
22867	Insertion of interlaminar/interspinous process stabilization/distraction device, without fusion, including image guidance when performed, with open decompression, lumbar; single level
22868	Insertion of interlaminar/interspinous process stabilization/distraction device, without fusion, including image guidance when performed, with open decompression, lumbar; second level (List separately in addition to code for primary procedure)
22869	Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including image guidance when performed, lumbar; single level
22870	Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including image guidance when performed, lumbar; second level (List separately in addition to code for primary procedure)
62380	Endoscopic decompression of spinal cord, nerve root(s), including laminotomy, partial facetectomy, foraminotomy, discectomy and/or eXcision of herniated intervertebral disc, 1 interspace, lumbar
63001	Laminectomy with eXploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (eg, spinal stenosis), 1 or 2 vertebral segments; cervical
63005	Laminectomy with eXploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (eg, spinal stenosis), 1 or 2 vertebral segments; lumbar, eXcept for spondylolisthesis
63012	Laminectomy with removal of abnormal facets and/or pars inter-articularis with decompression of cauda equina and nerve roots for spondylolisthesis, lumbar (Gill type procedure)
63015	Laminectomy with eXploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (eg, spinal stenosis), more than 2 vertebral segments; cervical
63017	Laminectomy with eXploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (eg, spinal stenosis), more than 2 vertebral segments; lumbar
63020	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or eXcision of herniated intervertebral disc; 1 interspace, cervical
63030	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or eXcision of herniated intervertebral disc; 1 interspace, lumbar
63035	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc; each additional interspace, cervical or lumbar (List separately in addition to code for primary procedure)
63040	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or eXcision of herniated intervertebral disc, reeXploration, single interspace; cervical
63042	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or eXcision of herniated intervertebral disc, reeXploration, single interspace; lumbar

A-4 Musculoskeletal - Spine	
Code	**Code Description**
63043	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; each additional cervical interspace (List separately in addition to code for primary procedure)
63044	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; each additional lumbar interspace (List separately in addition to code for primary procedure)
63045	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [eg, spinal or lateral recess stenosis]), single vertebral segment; cervical
63047	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [eg, spinal or lateral recess stenosis]), single vertebral segment; lumbar
63048	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [eg, spinal or lateral recess stenosis]), single vertebral segment; each additional segment, cervical, thoracic, or lumbar (List separately in addition to code for primary procedure)
63050	Laminoplasty, cervical, with decompression of the spinal cord, 2 or more vertebral segments;
63051	Laminoplasty, cervical, with decompression of the spinal cord, 2 or more vertebral segments; with reconstruction of the posterior bony elements (including the application of bridging bone graft and non-segmental fiXation devices [eg, wire, suture, mini-plates], when performed)
63056	Transpedicular approach with decompression of spinal cord, equina and/or nerve root(s) (eg, herniated intervertebral disc), single segment; lumbar (including transfacet, or lateral eXtraforaminal approach) (eg, far lateral herniated intervertebral disc)
63057	Transpedicular approach with decompression of spinal cord, equina and/or nerve root(s) (eg, herniated intervertebral disc), single segment; each additional segment, thoracic or lumbar (List separately in addition to code for primary procedure)
63075	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; cervical, single interspace
63076	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; cervical, each additional interspace (List separately in addition to code for primary procedure)
63081	Vertebral corpectomy (vertebral body resection), partial or complete, anterior approach with decompression of spinal cord and/or nerve root(s); cervical, single segment
63082	Vertebral corpectomy (vertebral body resection), partial or complete, anterior approach with decompression of spinal cord and/or nerve root(s); cervical, each additional segment (List separately in addition to code for primary procedure)
0164T	Removal of total disc arthroplasty, (artificial disc), anterior approach, each additional interspace, lumbar (List separately in addition to code for primary procedure)
E0748	Osteogenesis stimulator, electrical, non-invasive, spinal applications
E0749	Osteogenesis stimulator, electrical, surgically implanted
S2360	Percutaneous vertebroplasty, one vertebral body, unilateral or bilateral injection; cervical
S2361	Each additional cervical vertebral body (list separately in addition to code for primary procedure)

A-4 Musculoskeletal - Pain	
Code	**Code Description**
27096	Injection procedure for sacroiliac joint, anesthetic/steroid, with image guidance (fluoroscopy or CT) including arthrography when performed
62280	Injection/infusion of neurolytic substance (eg, alcohol, phenol, iced saline solutions), with or without other therapeutic substance; subarachnoid
62281	Injection/infusion of neurolytic substance (eg, alcohol, phenol, iced saline solutions), with or without other therapeutic substance; epidural, cervical or thoracic
62282	Injection/infusion of neurolytic substance (eg, alcohol, phenol, iced saline solutions), with or without other therapeutic substance; epidural, lumbar, sacral (caudal)
62320	Injection(s), of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, cervical or thoracic; without imaging guidance
62321	Injection(s), of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, cervical or thoracic; with imaging guidance (ie, fluoroscopy or CT)
62322	Injection(s), of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); without imaging guidance
62323	Injection(s), of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); with imaging guidance (ie, fluoroscopy or CT)
62324	Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, interlaminar epidural or subarachnoid, cervical or thoracic; without imaging guidance
62325	Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, interlaminar epidural or subarachnoid, cervical or thoracic; with imaging guidance (ie, fluoroscopy or CT)
62326	Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); without imaging guidance
62327	Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (eg, anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); with imaging guidance (ie, fluoroscopy or CT)
62350	Implantation, revision or repositioning of tunneled intrathecal or epidural catheter, for long-term medication administration via an external pump or implantable reservoir/infusion pump; without laminectomy
62351	Implantation, revision or repositioning of tunneled intrathecal or epidural catheter, for long-term medication administration via an external pump or implantable reservoir/infusion pump; with laminectomy
62360	Implantation or replacement of device for intrathecal or epidural drug infusion; subcutaneous reservoir

A-4 Musculoskeletal - Pain	
Code	**Code Description**
62361	Implantation or replacement of device for intrathecal or epidural drug infusion; nonprogrammable pump
62362	Implantation or replacement of device for intrathecal or epidural drug infusion; programmable pump, including preparation of pump, with or without programming
63650	Percutaneous implantation of neurostimulator electrode array, epidural
63655	Laminectomy for implantation of neurostimulator electrodes, plate/paddle, epidural
63685	Insertion or replacement of spinal neurostimulator pulse generator or receiver, direct or inductive coupling
64479	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); cervical or thoracic, single level
64480	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); cervical or thoracic, each additional level (List separately in addition to code for primary procedure)
64483	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); lumbar or sacral, single level
64484	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); lumbar or sacral, each additional level (List separately in addition to code for primary procedure)
64490	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), cervical or thoracic; single level
64491	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), cervical or thoracic; second level (List separately in addition to code for primary procedure)
64492	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), cervical or thoracic; third and any additional level(s) (List separately in addition to code for primary procedure)
64493	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral; single level
64494	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral; second level (List separately in addition to code for primary procedure)
64495	Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral; third and any additional level(s) (List separately in addition to code for primary procedure)
64510	Injection, anesthetic agent; stellate ganglion (cervical sympathetic)
64520	Injection, anesthetic agent; lumbar or thoracic (paravertebral sympathetic)
64633	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); cervical or thoracic, single facet joint
64634	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); cervical or thoracic, each additional facet joint (List separately in addition to code for primary procedure)
64635	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); lumbar or sacral, single facet joint
64636	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); lumbar or sacral, each additional facet joint (List separately in addition to code for primary procedure)

A-5 Sleep Testing	
Code	**Code Description**
95782	Polysomnography; younger than 6 years, sleep staging with 4 or more additional parameters of sleep, attended by a technologist
95783	Polysomnography; younger than 6 years, sleep staging with 4 or more additional parameters of sleep, with initiation of continuous positive airway pressure therapy or bi-level ventilation, attended by a technologist
95800	Sleep study, unattended, simultaneous recording; heart rate, oxygen saturation, respiratory analysis (eg, by airflow or peripheral arterial tone), and sleep time
95801	Sleep study, unattended, simultaneous recording; minimum of heart rate, oxygen saturation, and respiratory analysis (eg, by airflow or peripheral arterial tone)
95805	Multiple sleep latency or maintenance of wakefulness testing, recording, analysis and interpretation of physiological measurements of sleep during multiple trials to assess sleepiness
95806	Sleep study, unattended, simultaneous recording of, heart rate, oxygen saturation, respiratory airflow, and respiratory effort (eg, thoracoabdominal movement)
95807	Sleep study, simultaneous recording of ventilation, respiratory effort, ECG or heart rate, and oxygen saturation, attended by a technologist
95808	Polysomnography; any age, sleep staging with 1-3 additional parameters of sleep, attended by a technologist
95810	Polysomnography; age 6 years or older, sleep staging with 4 or more additional parameters of sleep, attended by a technologist
95811	Polysomnography; age 6 years or older, sleep staging with 4 or more additional parameters of sleep, with initiation of continuous positive airway pressure therapy or bilevel ventilation, attended by a technologist
G0398	Home sleep study test (hst) with type ii portable monitor, unattended; minimum of 7 channels: eeg, eog, emg, ecg/heart rate, airflow, respiratory effort and oxygen saturation
G0399	Home sleep test (hst) with type iii portable monitor, unattended; minimum of 4 channels: 2 respiratory movement/airflow, 1 ecg/heart rate and 1 oxygen saturation
G0400	Home sleep test (hst) with type iv portable monitor, unattended; minimum of 3 channels
A4604	Tubing with integrated heating element for use with positive airway pressure device
A7027	Combination oral/nasal mask, used with continuous positive airway pressure device, each
A7028	Oral cushion for combination oral/nasal mask, replacement only, each
A7029	Nasal pillows for combination oral/nasal mask, replacement only, pair
A7030	Full face mask used with positive airway pressure device, each
A7031	Face mask interface, replacement for full face mask, each
A7032	Cushion for use on nasal mask interface, replacement only, each
A7033	Pillow for use on nasal cannula type interface, replacement only, pair
A7034	Nasal interface (mask or cannula type) used with positive airway pressure device, with or without head strap
A7035	Headgear used with positive airway pressure device
A7036	Chinstrap used with positive airway pressure device
A7037	Tubing used with positive airway pressure device
A7038	Filter, disposable, used with positive airway pressure device
A7039	Filter, non disposable, used with positive airway pressure device
A7044	Oral interface used with positive airway pressure device, each
A7045	Exhalation port with or without swivel used with accessories for positive airway devices, replacement only
A7046	Water chamber for humidifier, used with positive airway pressure device, replacement, each
E0470	Respiratory assist device, bi-level pressure capability, without backup rate feature, used with noninvasive interface, e.g., nasal or facial mask (intermittent assist device with continuous positive airway pressure device)

A-5 Sleep Testing	
Code	**Code Description**
E0471	Respiratory assist device, bi-level pressure capability, with back-up rate feature, used with noninvasive interface, e.g., nasal or facial mask (intermittent assist device with continuous positive airway pressure device)
E0601	Continuous positive airway pressure (cpap) device
E0561	Humidifier, non-heated, used with positive airway pressure device
E0562	Humidifier, heated, used with positive airway pressure device

A-6 Medical Oncology		
Code	**Code Description**	**Brand Description**
C9483	Injection, atezolizumab, 10 mg	Tecentriq
J0202	Injection, alemtuzumab, 1 mg	
J0207	Injection, amifostine, 500 mg	
J0640	Injection, leucovorin calcium, per 50 mg	
J0641	Injection, levoleucovorin calcium, 0.5 mg	
J0881	Injection, darbepoetin alfa, 1 microgram (non-esrd use)	
J0885	Injection, epoetin alfa, (for non-esrd use), 1000 units	Epogen, Procrit
J0888	Injection, epoetin beta, 1 microgram, (for non esrd use)	
J0894	Injection, decitabine, 1 mg	
J0897	Injection, denosumab, 1 mg	Xgeva, Prolia
J1442	Injection, filgrastim (g-csf), eXcludes biosimilars, 1 microgram	
J1447	Injection, tbo-filgrastim, 1 microgram	
J1453	Injection, fosaprepitant, 1 mg	
J1930	Injection, lanreotide, 1 mg	
J2353	Injection, octreotide, depot form for intramuscular injection, 1 mg	
J2354	Injection, octreotide, non-depot form for subcutaneous or intravenous injection, 25 mcg	
J2355	Injection, oprelvekin, 5 mg	
J2430	Injection, pamidronate disodium, per 30 mg	
J2469	Injection, palonosetron hcl, 25 mcg	
J2505	Injection, pegfilgrastim, 6 mg	
J2562	Injection, pleriXafor, 1 mg	
J2783	Injection, rasburicase, 0.5 mg	
J2820	Injection, sargramostim (gm-csf), 50 mcg	
J2860	Injection, siltuXimab, 10 mg	
J3262	Injection, tocilizumab, 1 mg	
J3315	Injection, triptorelin pamoate, 3.75 mg	
J3489	Injection, zoledronic acid, 1 mg	
J3490	Unclassified drugs	PegIntron, Sylatron
J3490	Unclassified drugs	Granisetron
J3590	Unclassified biologics	
J9999	Unclassified neoplastic	
J9000	Injection, doxorubicin hydrochloride, 10 mg	Adriamycin,
J9015	Injection, aldesleukin, per single use vial	Proleukin, Interleukin-2
J9017	Injection, arsenic trioXide, 1 mg	
J9019	Injection, asparaginase (erwinaze), 1,000 iu	
J9025	Injection, azacitidine, 1 mg	
J9027	Injection, clofarabine, 1 mg	
J9031	BCG (intravesical) per instillation	TheraCys, Tice
J9032	Injection, belinostat, 10 mg	
J9033	Injection, bendamustine hcl, 1 mg	
J9034	Injection, bendamustine HCl (bendeka), 1 mg	
J9035	Injection, bevacizumab, 10 mg	

A-6 Medical Oncology		
Code	**Code Description**	**Brand Description**
J9039	Injection, blinatumomab, 1 microgram	
J9040	Injection, bleomycin sulfate, 15 units	
J9041	Injection, bortezomib, 0.1 mg	
J9042	Injection, brentuXimab vedotin, 1 mg	
J9043	Injection, cabazitaXel, 1 mg	
J9045	Injection, carboplatin, 50 mg	
J9047	Injection, carfilzomib, 1 mg	
J9050	Injection, carmustine, 100 mg	BiCNU, BCNU
J9055	Injection, cetuXimab, 10 mg	
J9060	Injection, cisplatin, powder or solution, 10 mg	
J9098	Injection, cytarabine liposome, 10 mg	
J9100	Injection, cytarabine, 100 mg	
J9120	Injection, dactinomycin, 0.5 mg	Cosmegen, Actinomycin
J9130	Dacarbazine, 100 mg	
J9145	Injection, daratumumab, 10 mg	Daratumumab
J9150	Injection, daunorubicin, 10 mg	
J9151	Injection, daunorubicin citrate, liposomal formulation, 10 mg	
J9155	Injection, degareliX, 1 mg	
J9171	Injection, docetaXel, 1 mg	
J9175	Injection, elliotts' b solution, 1 ml	
J9176	Injection, elotuzumab, 1 mg	Elotuzumab
J9178	Injection, epirubicin hcl, 2 mg	
J9179	Injection, eribulin mesylate, 0.1 mg	
J9181	Injection, etoposide, 10 mg	Toposar, VePesid
J9185	Injection, fludarabine phosphate, 50 mg	Fludara, Oforta
J9190	Injection, fluorouracil, 500 mg	5FU, Adrucil
J9200	Injection, floXuridine, 500 mg	
J9201	Injection, gemcitabine hydrochloride, 200 mg	
J9202	Goserelin acetate implant, per 3.6 mg	
J9205	Injection, irinotecan liposome, 1 mg	Onivyde
J9206	Injection, irinotecan, 20 mg	
J9207	Injection, iXabepilone, 1 mg	
J9208	Injection, ifosfamide, 1 gram	IfeX, Mitoxana
J9209	Injection, mesna, 200 mg	
J9211	Injection, idarubicin hydrochloride, 5 mg	
J9214	Injection, interferon, alfa-2b, recombinant, 1 million units	
J9216	Injection, interferon, gamma 1-b, 3 million units	
J9217	Leuprolide acetate (for depot suspension), 7.5 mg	Eligard, Lupron Depot, Lupron
J9225	Histrelin implant (vantas), 50 mg	
J9228	Injection, ipilimumab, 1 mg	
J9230	Injection, mechlorethamine hydrochloride, (nitrogen mustard), 10 mg	

A-6 Medical Oncology		
Code	**Code Description**	**Brand Description**
J9245	Injection, melphalan hydrochloride, 50 mg	
J9261	Injection, nelarabine, 50 mg	
J9262	Injection, omacetaXine mepesuccinate, 0.01 mg	
J9263	Injection, oXaliplatin, 0.5 mg	
J9264	Injection, paclitaXel protein-bound particles, 1 mg	
J9266	Injection, pegaspargase, per single dose vial	
J9267	Injection, paclitaXel, 1 mg	Nov-Onxol, TaXol
J9268	Injection, pentostatin, 10 mg	
J9271	Injection, pembrolizumab, 1 mg	
J9280	Injection, mitomycin, 5 mg	
J9293	Injection, mitoXantrone hydrochloride, per 5 mg	
J9295	Injection, necitumumab, 1 mg	Portrazza
J9299	Injection, nivolumab, 1 mg	
J9301	Injection, obinutuzumab, 10 mg	
J9302	Injection, ofatumumab, 10 mg	
J9303	Injection, panitumumab, 10 mg	
J9305	Injection, pemetreXed, 10 mg	
J9306	Injection, pertuzumab, 1 mg	
J9307	Injection, pralatreXate, 1 mg	
J9308	Injection, ramucirumab, 5 mg	
J9310	Injection, rituXimab, 100 mg	
J9315	Injection, romidepsin, 1 mg	
J9320	Injection, streptozocin, 1 gram	
J9325	Injection, talimogene laherparepvec, per 1 million plaque forming units	Imlygic
J9328	Injection, temozolomide, 1 mg	
J9330	Injection, temsirolimus, 1 mg	
J9340	Injection, thiotepa, 15 mg	
J9351	Injection, topotecan, 0.1 mg	
J9352	Injection, trabectedin, 0.1 mg	Yondelis
J9354	Injection, ado-trastuzumab emtansine, 1 mg	
J9355	Injection, trastuzumab, 10 mg	
J9357	Injection, valrubicin, intravesical, 200 mg	
J9360	Injection, vinblastine sulfate, 1 mg	
J9370	Vincristine sulfate, 1 mg	Oncovin, Vincasar PFS
J9371	Injection, vincristine sulfate liposome, 1 mg	
J9390	Injection, vinorelbine tartrate, 10 mg	
J9395	Injection, fulvestrant, 25 mg	
J9400	Injection, ziv-aflibercept, 1 mg	
J9600	Injection, porfimer sodium, 75 mg	
Q2017	Injection, teniposide, 50 mg	
Q2043	Sipuleucel-t, minimum of 50 million autologous cd54+ cells activated with pap-gm-csf, including leukapheresis and all other preparatory procedures, per infusion	

A-6 Medical Oncology		
Code	**Code Description**	**Brand Description**
Q2049	Injection, doXorubicin hydrochloride, liposomal, imported lipodoX, 10 mg	DoXil, LipodoX
Q5101	Injection, filgrastim (g-csf), biosimilar, 1 microgram	
J9034	Injection, bendamustine hcl (bendeka), 1 mg	
J9145	Injection, daratumumab, 10 mg	
J9176	Injection, elotuzumab, 1 mg	
J9205	Injection, irinotecan liposome, 1 mg	
J9295	Injection, necitumumab, 1 mg	
J9325	Injection, talimogene laherparepvec, per 1 million plaque forming units	
J9352	Injection, trabectedin, 0.1 mg	

A-7 Radiation Oncology	
Code	**Code Description**
77014	Computed tomography guidance for placement of radiation therapy fields
77371	Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cranial lesion(s) consisting of 1 session; multi-source Cobalt 60 based
77372	Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cranial lesion(s) consisting of 1 session; linear accelerator based
77373	Stereotactic body radiation therapy, treatment delivery, per fraction to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions
77385	Intensity modulated radiation treatment delivery (IMRT), includes guidance and tracking, when performed; simple
77386	Intensity modulated radiation treatment delivery (IMRT), includes guidance and tracking, when performed; complex
77387	Guidance for localization of target volume for delivery of radiation treatment delivery, includes intrafraction tracking, when performed
77401	Radiation treatment delivery, superficial and/or ortho voltage, per day
77402	Radiation treatment delivery, >=1 MeV; simple
77407	Radiation treatment delivery, >=1 MeV; intermediate
77412	Radiation treatment delivery, >=1 MeV; complex
77422	High energy neutron radiation treatment delivery; single treatment area using a single port or parallel-opposed ports with no blocks or simple blocking
77423	High energy neutron radiation treatment delivery; 1 or more isocenter(s) with coplanar or non-coplanar geometry with blocking and/or wedge, and/or compensator(s)
77424	Intraoperative radiation treatment delivery, x-ray, single treatment session
77425	Intraoperative radiation treatment delivery, electrons, single treatment session
77520	Proton treatment delivery; simple, without compensation
77522	Proton treatment delivery; simple, with compensation
77523	Proton treatment delivery; intermediate
77525	Proton treatment delivery; complex
77600	Hyperthermia, externally generated; superficial (ie, heating to a depth of 4 cm or less)
77605	Hyperthermia, externally generated; deep (ie, heating to depths greater than 4 cm)
77610	Hyperthermia generated by interstitial probe(s); 5 or fewer interstitial applicators
77615	Hyperthermia generated by interstitial probe(s); more than 5 interstitial applicators
77620	Hyperthermia generated by intracavitary probe(s)
77750	Infusion or instillation of radioelement solution (includes 3-month follow-up care)
77761	Intracavitary radiation source application; simple
77762	Intracavitary radiation source application; intermediate
77763	Intracavitary radiation source application; complex
77767	Remote afterloading high dose rate radionuclide skin surface brachytherapy, includes basic dosimetry, when performed; lesion diameter up to 2.0 cm or 1 channel
77768	Remote afterloading high dose rate radionuclide skin surface brachytherapy, includes basic dosimetry, when performed; lesion diameter over 2.0 cm and 2 or more channels, or multiple lesions
77770	Remote afterloading high dose rate radionuclide interstitial or intracavitary brachytherapy, includes basic dosimetry, when performed; 1 channel

A-7 Radiation Oncology	
Code	**Code Description**
77771	Remote afterloading high dose rate radionuclide interstitial or intracavitary brachytherapy, includes basic dosimetry, when performed; 2-12 channels
77772	Remote afterloading high dose rate radionuclide interstitial or intracavitary brachytherapy, includes basic dosimetry, when performed; over 12 channels
77778	Interstitial radiation source application, complex, includes supervision, handling, loading of radiation source, when performed
79403	Radiopharmaceutical therapy, radiolabeled monoclonal antibody by intravenous infusion
0394T	High dose rate electronic brachytherapy, skin surface application, per fraction, includes basic dosimetry, when performed
0395T	High dose rate electronic brachytherapy, interstitial or intracavitary treatment, per fraction, includes basic dosimetry, when performed
A9543	Yttrium y-90 ibritumomab tiuxetan, therapeutic, per treatment dose, up to 40 millicuries
A9606	Radium ra-223 dichloride, therapeutic, per microcurie
G0339	Image-guided robotic linear accelerator-based stereotactic radiosurgery, complete course of therapy in one session or first session of fractionated treatment
G0340	Image-guided robotic linear accelerator-based stereotactic radiosurgery, delivery including collimator changes and custom plugging, fractionated treatment, all lesions, per session, second through fifth sessions, maximum five sessions per course of treatment
G6001	Ultrasonic guidance for placement of radiation therapy fields
G6002	Stereoscopic x-ray guidance for localization of target volume for the delivery of radiation therapy
G6003	Radiation treatment delivery, single treatment area,single port or parallel opposed ports, simple blocks or no blocks: up to 5 mev
G6004	Radiation treatment delivery, single treatment area,single port or parallel opposed ports, simple blocks or no blocks: 6-10 mev
G6005	Radiation treatment delivery, single treatment area,single port or parallel opposed ports, simple blocks or no blocks: 11-19 mev
G6006	Radiation treatment delivery, single treatment area,single port or parallel opposed ports, simple blocks or no blocks: 20 mev or greater
G6007	Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks: up to 5 mev
G6008	Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks: 6-10 mev
G6009	Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks: 11-19 mev
G6010	Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks: 20 mev or greater
G6011	Radiation treatment delivery,3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; up to 5 mev
G6012	Radiation treatment delivery,3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 6-10 mev
G6013	Radiation treatment delivery,3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 11-19 mev

A-7 Radiation Oncology	
Code	**Code Description**
G6014	Radiation treatment delivery,3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 20 mev or greater
G6015	Intensity modulated treatment delivery, single or multiple fields/arcs,via narrow spatially and temporally modulated beams, binary, dynamic mlc, per treatment session
G6016	Compensator-based beam modulation treatment delivery of inverse planned treatment using 3 or more high resolution (milled or cast) compensator, convergent beam modulated fields, per treatment session

A-8 Molecular Genetic Lab	
Code	**Code Description**
81162	BRCA1, BRCA2 (breast cancer 1 and 2) (eg, hereditary breast and ovarian cancer) gene analysis; full sequence analysis and full duplication/deletion analysis
81201	APC (adenomatous polyposis coli) (eg, familial adenomatosis polyposis [FAP], attenuated FAP) gene analysis; full gene sequence
81203	APC (adenomatous polyposis coli) (eg, familial adenomatosis polyposis [FAP], attenuated FAP) gene analysis; duplication/deletion variants
81211	BRCA1, BRCA2 (breast cancer 1 and 2) (eg, hereditary breast and ovarian cancer) gene analysis; full sequence analysis and common duplication/deletion variants in BRCA1 (ie, exon 13 del 3.835kb, exon 13 dup 6kb, exon 14-20 del 26kb, exon 22 del 510bp, exon 8-9 del 7.1kb)
81212	BRCA1, BRCA2 (breast cancer 1 and 2) (eg, hereditary breast and ovarian cancer) gene analysis; 185delAG, 5385insC, 6174delT variants
81213	BRCA1, BRCA2 (breast cancer 1 and 2) (eg, hereditary breast and ovarian cancer) gene analysis; uncommon duplication/deletion variants
81214	BRCA1 (breast cancer 1) (eg, hereditary breast and ovarian cancer) gene analysis; full sequence analysis and common duplication/deletion variants (ie, exon 13 del 3.835kb, exon 13 dup 6kb, exon 14-20 del 26kb, exon 22 del 510bp, exon 8-9 del 7.1kb)
81215	BRCA1 (breast cancer 1) (eg, hereditary breast and ovarian cancer) gene analysis; known familial variant
81216	BRCA2 (breast cancer 2) (eg, hereditary breast and ovarian cancer) gene analysis; full sequence analysis
81217	BRCA2 (breast cancer 2) (eg, hereditary breast and ovarian cancer) gene analysis; known familial variant
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 constitutional (genome-wide) microarray analysis; interrogation of genomic regions for copy number variants (eg, bacterial artificial chromosome [BAC] or oligo-based comparative genomic hybridization [CGH] microarray analysis)
81229	Cytogenomic constitutional (genome-wide) microarray analysis; interrogation of genomic regions for copy number and single nucleotide polymorphism (SNP) variants for chromosomal abnormalities
81287	MGMT (O-6-methylguanine-DNA methyltransferase) (eg, glioblastoma multiforme), methylation analysis
81291	MTHFR (5,10-methylenetetrahydrofolate reductase) (eg, hereditary hypercoagulability) gene analysis, common variants (eg, 677T, 1298C)
81292	MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis
81294	MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants
81295	MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis

A-8 Molecular Genetic Lab	
Code	**Code Description**
81297	MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants
81298	MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis
81300	MSH6 (mutS homolog 6 [E. coli]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants
81313	PCA3/KLK3 (prostate cancer antigen 3 [non-protein coding]/kallikrein-related peptidase 3 [prostate specific antigen]) ratio (eg, prostate cancer)
81317	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis
81319	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants
81321	PTEN (phosphatase and tensin homolog) (eg, Cowden syndrome, PTEN hamartoma tumor syndrome) gene analysis; full sequence analysis
81323	PTEN (phosphatase and tensin homolog) (eg, Cowden syndrome, PTEN hamartoma tumor syndrome) gene analysis; duplication/deletion variant
81325	PMP22 (peripheral myelin protein 22) (eg, Charcot-Marie-Tooth, hereditary neuropathy with liability to pressure palsies) gene analysis; full sequence analysis
81327	SEPT9 (Septin9) (eg, colorectal cancer) methylation analysis
81355	VKORC1 (vitamin K epoxide reductase complex, subunit 1) (eg, warfarin metabolism), gene analysis, common variant(s) (eg, -1639G>A, c.173+1000C>T)

A-8 Molecular Genetic Lab	
Code	**Code Description**
81400	Molecular pathology procedure, Level 1 (eg, identification of single germline variant [eg, SNP] by techniques such as restriction enzyme digestion or melt curve analysis) ACADM (acyl-CoA dehydrogenase, C-4 to C-12 straight chain, MCAD) (eg, medium chain acyl dehydrogenase deficiency), K304E variant ACE (angiotensin converting enzyme) (eg, hereditary blood pressure regulation), insertion/deletion variant AGTR1 (angiotensin II receptor, type 1) (eg, essential hypertension), 1166A>C variant BCKDHA (branched chain keto acid dehydrogenase E1, alpha polypeptide) (eg, maple syrup urine disease, type 1A), Y438N variant CCR5 (chemokine C-C motif receptor 5) (eg, HIV resistance), 32-bp deletion mutation/794 825del32 deletion CLRN1 (clarin 1) (eg, Usher syndrome, type 3), N48K variant DPYD (dihydropyrimidine dehydrogenase) (eg, 5-fluorouracil/5-FU and capecitabine drug metabolism), IVS14+1G>A variant F2 (coagulation factor 2) (eg, hereditary hypercoagulability), 1199G>A variant F5 (coagulation factor V) (eg, hereditary hypercoagulability), HR2 variant F7 (coagulation factor VII [serum prothrombin conversion accelerator]) (eg, hereditary hypercoagulability), R353Q variant F13B (coagulation factor XIII, B polypeptide) (eg, hereditary hypercoagulability), V34L variant FGB (fibrinogen beta chain) (eg, hereditary ischemic heart disease), -455G>A variant FGFR1 (fibroblast growth factor receptor 1) (eg, Pfeiffer syndrome type 1, craniosynostosis), P252R variant FGFR3 (fibroblast growth factor receptor 3) (eg, Muenke syndrome), P250R variant FKTN (fukutin) (eg, Fukuyama congenital muscular dystrophy), retrotransposon insertion variant GNE (glucosamine [UDP-N-acetyl]-2-epimerase/N-acetylmannosamine kinase) (eg, inclusion body myopathy 2 [IBM2], Nonaka myopathy), M712T variant 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), HPA-1a/b (L33P) Human Platelet Antigen 2 genotyping (HPA-2), GP1BA (glycoprotein Ib [platelet], alpha polypeptide [GPIba]) (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura), HPA-2a/b (T145M) 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), HPA-3a/b (I843S) 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), HPA-4a/b (R143Q) 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), HPA-5a/b (K505E) 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), HPA-6a/b (R489Q) 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), HPA-9a/b (V837M) Human Platelet Antigen 15 genotyping (HPA-15), CD109 (CD109 molecule) (eg, neonatal alloimmune thrombocytopenia [NAIT], post-transfusion purpura), HPA-15a/b (S682Y) IL28B (interleukin 28B [interferon, lambda 3]) (eg, drug response), rs12979860 variant IVD (isovaleryl-CoA dehydrogenase) (eg, isovaleric acidemia), A282V variant LCT (lactase-phlorizin hydrolase) (eg, lactose intolerance), 13910 C>T variant NEB (nebulin) (eg, nemaline myopathy 2), exon 55 deletion variant PCDH15 (protocadherin-related 15) (eg, Usher syndrome type 1F), R245X variant SERPINE1 (serpine peptidase inhibitor clade E, member 1, plasminogen activator inhibitor -1, PAI-1) (eg, thrombophilia), 4G variant SHOC2 (soc-2 suppressor of clear homolog) (eg, Noonan-like syndrome with loose anagen hair), S2G variant SLCO1B1 (solute carrier organic anion transporter family, member 1B1) (eg, adverse drug reaction), V174A variant SMN1 (survival of motor neuron 1, telomeric) (eg, spinal muscular atrophy), exon 7 deletion SRY (sex determining region Y) (eg, 46,XX testicular disorder of sex development, gonadal dysgenesis), gene analysis TOR1A (torsin family 1, member A [torsin A]) (eg, early-onset primary dystonia [DYT1]), 907_909delGAG (904_906delGAG) variant

A-8 Molecular Genetic Lab	
Code	**Code Description**
81401	Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat) ABCC8 (ATP-binding cassette, sub-family C [CFTR/MRP], member 8) (eg, familial hyperinsulinism), common variants (eg, c.3898-9G>A [c.3992-9G>A], F1388del) ABL1 (ABL proto-oncogene 1, non-receptor tyrosine kinase) (eg, acquired imatinib resistance), T315I variant ACADM (acyl-CoA dehydrogenase, C-4 to C-12 straight chain, MCAD) (eg, medium chain acyl dehydrogenase deficiency), commons variants (eg, K304E, Y42H) ADRB2 (adrenergic beta-2 receptor surface) (eg, drug metabolism), common variants (eg, G16R, Q27E) AFF2 (AF4/FMR2 family, member 2 [FMR2]) (eg, fragile X mental retardation 2 [FRAXE]), evaluation to detect abnormal (eg, expanded) alleles APOB (apolipoprotein B) (eg, familial hypercholesterolemia type B), common variants (eg, R3500Q, R3500W) APOE (apolipoprotein E) (eg, hyperlipoproteinemia type III, cardiovascular disease, Alzheimer disease), common variants (eg, *2, *3, *4) AR (androgen receptor) (eg, spinal and bulbar muscular atrophy, Kennedy disease, X chromosome inactivation), characterization of alleles (eg, expanded size or methylation status) ATN1 (atrophin 1) (eg, dentatorubral-pallidoluysian atrophy), evaluation to detect abnormal (eg, expanded) alleles ATXN1 (ataxin 1) (eg, spinocerebellar ataxia), evaluation to detect abnormal (eg, expanded) alleles ATXN2 (ataxin 2) (eg, spinocerebellar ataxia), evaluation to detect abnormal (eg, expanded) alleles ATXN3 (ataxin 3) (eg, spinocerebellar ataxia, Machado-Joseph disease), evaluation to detect abnormal (eg, expanded) alleles ATXN7 (ataxin 7) (eg, spinocerebellar ataxia), evaluation to detect abnormal (eg, expanded) alleles ATXN8OS (ATXN8 opposite strand [non-protein coding]) (eg, spinocerebellar ataxia), evaluation to detect abnormal (eg, expanded) alleles ATXN10 (ataxin 10) (eg, spinocerebellar ataxia), evaluation to detect abnormal (eg, expanded) alleles CACNA1A (calcium channel, voltage-dependent, P/Q type, alpha 1A subunit) (eg, spinocerebellar ataxia), evaluation to detect abnormal (eg, expanded) alleles CBFB/MYH11 (inv(16)) (eg, acute myeloid leukemia), qualitative, and quantitative, if performed CBS (cystathionine-beta-synthase) (eg, homocystinuria, cystathionine beta-synthase deficiency), common variants (eg, I278T, G307S) CCND1/IGH (BCL1/IgH, t(11;14)) (eg, mantle cell lymphoma) translocation analysis, major breakpoint, qualitative, and quantitative, if performed CFH/ARMS2 (complement factor H/age-related maculopathy susceptibility 2) (eg, macular degeneration), common variants (eg, Y402H [CFH], A69S [ARMS2]) CNBP (CCHC-type zinc finger, nucleic acid binding protein) (eg, myotonic dystrophy type 2), evaluation to detect abnormal (eg, expanded) alleles CSTB (cystatin B [stefin B]) (eg, Unverricht-Lundborg disease), evaluation to detect abnormal (eg, expanded) alleles CYP3A4 (cytochrome P450, family 3, subfamily A, polypeptide 4) (eg, drug metabolism), common variants (eg, *2, *3, *4, *5, *6) CYP3A5 (cytochrome P450, family 3, subfamily A, polypeptide 5) (eg, drug metabolism), common variants (eg, *2, *3, *4, *5, *6) DEK/NUP214 (t(6;9)) (eg, acute myeloid leukemia), translocation analysis, qualitative, and quantitative, if performed DMPK (dystrophia myotonica-protein kinase) (eg, myotonic dystrophy, type 1), evaluation to detect abnormal (eg, expanded) alleles E2A/PBX1 (t(1;19)) (eg, acute lymphocytic leukemia), translocation analysis, qualitative, and quantitative, if performed EML4/ALK (inv(2)) (eg, non-small cell lung cancer), translocation or inversion analysis ETV6/NTRK3 (t(12;15)) (eg, congenital/infantile fibrosarcoma), translocation analysis, qualitative, and quantitative, if performed ETV6/RUNX1 (t(12;21)) (eg, acute lymphocytic leukemia), translocation analysis, qualitative, and quantitative, if performed EWSR1/ATF1 (t(12;22)) (eg, clear cell sarcoma), translocation analysis, qualitative, and quantitative, if performed EWSR1/ERG (t(21;22)) (eg, Ewing sarcoma/peripheral neuroectodermal tumor), translocation analysis, qualitative, and quantitative, if performed EWSR1/FLI1 (t(11;22)) (eg, Ewing sarcoma/peripheral neuroectodermal tumor), translocation analysis, qualitative, and quantitative, if performed EWSR1/WT1 (t(11;22)) (eg, desmoplastic small round cell tumor), translocation analysis, qualitative, and quantitative, if performed F11 (coagulation factor XI) (eg, coagulation disorder), common variants (eg, E117X [Type II], F283L [Type III], IVS14del14, and IVS14+1G>A [Type I]) FGFR3 (fibroblast growth factor receptor 3) (eg, achondroplasia, hypochondroplasia), common variants (eg, 1138G>A, 1138G>C, 1620C>A, 1620C>G)

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	FIP1L1/PDGFRA (del[4q12]) (eg, imatinib-sensitive chronic eosinophilic leukemia), qualitative, and quantitative, if performed FLG (filaggrin) (eg, ichthyosis vulgaris), common variants (eg, R501X, 2282del4, R2447X, S3247X, 3702delG) FOXO1/PAX3 (t(2;13)) (eg, alveolar rhabdomyosarcoma), translocation analysis, qualitative, and quantitative, if performed FOXO1/PAX7 (t(1;13)) (eg, alveolar rhabdomyosarcoma), translocation analysis, qualitative, and quantitative, if performed FUS/DDIT3 (t(12;16)) (eg, myxoid liposarcoma), translocation analysis, qualitative, and quantitative, if performed FXN (frataxin) (eg, Friedreich ataxia), evaluation to detect abnormal (expanded) alleles GALC (galactosylceramidase) (eg, Krabbe disease), common variants (eg, c.857G>A, 30-kb deletion) GALT (galactose-1-phosphate uridylyltransferase) (eg, galactosemia), common variants (eg, Q188R, S135L, K285N, T138M, L195P, Y209C, IVS2-2A>G, P171S, del5kb, N314D, L218L/N314D) H19 (imprinted maternally expressed transcript [non-protein coding]) (eg, Beckwith-Wiedemann syndrome), methylation analysis HBB (hemoglobin, beta) (eg, sickle cell anemia, hemoglobin C, hemoglobin E), common variants (eg, HbS, HbC, HbE) HTT (huntingtin) (eg, Huntington disease), evaluation to detect abnormal (eg, expanded) alleles IGH@/BCL2 (t(14;18)) (eg, follicular lymphoma), translocation analysis; single breakpoint (eg, major breakpoint region [MBR] or minor cluster region [mcr]), qualitative or quantitative (When both MBR and mcr breakpoints are performed, use 81402) KCNQ1OT1 (KCNQ1 overlapping transcript 1 [non-protein coding]) (eg, Beckwith-Wiedemann syndrome), methylation analysis LRRK2 (leucine-rich repeat kinase 2) (eg, Parkinson disease), common variants (eg, R1441G, G2019S, I2020T) MED12 (mediator complex subunit 12) (eg, FG syndrome type 1, Lujan syndrome), common variants (eg, R961W, N1007S) MEG3/DLK1 (maternally expressed 3 [non-protein coding]/delta-like 1 homolog [Drosophila]) (eg, intrauterine growth retardation), methylation analysis MLL/AFF1 (t(4;11)) (eg, acute lymphoblastic leukemia), translocation analysis, qualitative, and quantitative, if performed MLL/MLLT3 (t(9;11)) (eg, acute myeloid leukemia), translocation analysis, qualitative, and quantitative, if performed MT-ATP6 (mitochondrially encoded ATP synthase 6) (eg, neuropathy with ataxia and retinitis pigmentosa [NARP], Leigh syndrome), common variants (eg, m.8993T>G, m.8993T>C) MT-ND4, MT-ND6 (mitochondrially encoded NADH dehydrogenase 4, mitochondrially encoded NADH dehydrogenase 6) (eg, Leber hereditary optic neuropathy [LHON]), common variants (eg, m.11778G>A, m.3460G>A, m.14484T>C) MT-ND5 (mitochondrially encoded tRNA leucine 1 [UUA/G], mitochondrially encoded NADH dehydrogenase 5) (eg, mitochondrial encephalopathy with lactic acidosis and stroke-like episodes [MELAS]), common variants (eg, m.3243A>G, m.3271T>C, m.3252A>G, m.13513G>A) MT-RNR1 (mitochondrially encoded 12S RNA) (eg, nonsyndromic hearing loss), common variants (eg, m.1555A>G, m.1494C>T) MT-TK (mitochondrially encoded tRNA lysine) (eg, myoclonic epilepsy with ragged-red fibers [MERRF]), common variants (eg, m.8344A>G, m.8356T>C) MT-TL1 (mitochondrially encoded tRNA leucine 1 [UUA/G]) (eg, diabetes and hearing loss), common variants (eg, m.3243A>G, m.14709 T>C) MT-TL1 MT-TS1, MT-RNR1 (mitochondrially encoded tRNA serine 1 [UCN], mitochondrially encoded 12S RNA) (eg, nonsyndromic sensorineural deafness [including aminoglycoside-induced nonsyndromic deafness]), common variants (eg, m.7445A>G, m.1555A>G) MUTYH (mutY homolog [E. coli]) (eg, MYH-associated polyposis), common variants (eg, Y165C, G382D) NOD2 (nucleotide-binding oligomerization domain containing 2) (eg, Crohn's disease, Blau syndrome), common variants (eg, SNP 8, SNP 12, SNP 13) NPM1/ALK (t(2;5)) (eg, anaplastic large cell lymphoma), translocation analysis PABPN1 (poly[A] binding protein, nuclear 1) (eg, oculopharyngeal muscular dystrophy), evaluation to detect abnormal (eg, expanded) alleles PAX8/PPARG (t(2;3) (q13;p25)) (eg, follicular thyroid carcinoma), translocation analysis PPP2R2B (protein phosphatase 2, regulatory subunit B, beta) (eg, spinocerebellar ataxia), evaluation to detect abnormal (eg, expanded) alleles PRSS1 (protease, serine, 1 [trypsin 1]) (eg, hereditary pancreatitis), common variants (eg, N29I, A16V, R122H) PYGM (phosphorylase, glycogen, muscle) (eg, glycogen storage disease type V, McArdle disease), common variants (eg, R50X, G205S) RUNX1/RUNX1T1 (t(8;21)) (eg, acute myeloid leukemia) translocation analysis, qualitative, and quantitative, if performed SMN1/SMN2

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	(survival of motor neuron 1, telomeric/survival of motor neuron 2, centromeric) (eg, spinal muscular atrophy), dosage analysis (eg, carrier testing) (For duplication/deletion analysis of SMN1/SMN2, use 81401) SS18/SSX1 (t(X;18)) (eg, synovial sarcoma), translocation analysis, qualitative, and quantitative, if performed SS18/SSX2 (t(X;18)) (eg, synovial sarcoma), translocation analysis, qualitative, and quantitative, if performed TBP (TATA box binding protein) (eg, spinocerebellar ataxia), evaluation to detect abnormal (eg, expanded) alleles TPMT (thiopurine S-methyltransferase) (eg, drug metabolism), common variants (eg, *2, *3) TYMS (thymidylate synthetase) (eg, 5-fluorouracil/5-FU drug metabolism), tandem repeat variant VWF (von Willebrand factor) (eg, von Willebrand disease type 2N), common variants (eg, T791M, R816W, R854Q)
81402	Molecular pathology procedure, Level 3 (eg, >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants of 1 exon, loss of heterozygosity [LOH], uniparental disomy [UPD]) Chromosome 1p-/19q- (eg, glial tumors), deletion analysis Chromosome 18q- (eg, D18S55, D18S58, D18S61, D18S64, and D18S69) (eg, colon cancer), allelic imbalance assessment (ie, loss of heterozygosity) COL1A1/PDGFB (t(17;22)) (eg, dermatofibrosarcoma protuberans), translocation analysis, multiple breakpoints, qualitative, and quantitative, if performed CYP21A2 (cytochrome P450, family 21, subfamily A, polypeptide 2) (eg, congenital adrenal hyperplasia, 21-hydroxylase deficiency), common variants (eg, IVS2-13G, P30L, I172N, exon 6 mutation cluster [I235N, V236E, M238K], V281L, L307FfsX6, Q318X, R356W, P453S, G110VfsX21, 30-kb deletion variant) ESR1/PGR (receptor 1/progesterone receptor) ratio (eg, breast cancer) IGH@/BCL2 (t(14;18)) (eg, follicular lymphoma), translocation analysis; major breakpoint region (MBR) and minor cluster region (mcr) breakpoints, qualitative or quantitative MEFV (Mediterranean fever) (eg, familial Mediterranean fever), common variants (eg, E148Q, P369S, F479L, M680I, I692del, M694V, M694I, K695R, V726A, A744S, R761H) MPL (myeloproliferative leukemia virus oncogene, thrombopoietin receptor, TPOR) (eg, myeloproliferative disorder), common variants (eg, W515A, W515K, W515L, W515R) TRD@ (T cell antigen receptor, delta) (eg, leukemia and lymphoma), gene rearrangement analysis, evaluation to detect abnormal clonal population Uniparental disomy (UPD) (eg, Russell-Silver syndrome, Prader-Willi/Angelman syndrome), short tandem repeat (STR) analysis
81403	Molecular pathology procedure, Level 4 (eg, analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons) ANG (angiogenin, ribonuclease, RNase A family, 5) (eg, amyotrophic lateral sclerosis), full gene sequence ARX (aristaless-related homeobox) (eg, X-linked lissencephaly with ambiguous genitalia, X-linked mental retardation), duplication/deletion analysis CEL (carboxyl ester lipase [bile salt-stimulated lipase]) (eg, maturity-onset diabetes of the young [MODY]), targeted sequence analysis of exon 11 (eg, c.1785delC, c.1686delT) CTNNB1 (catenin [cadherin-associated protein], beta 1, 88kDa) (eg, desmoid tumors), targeted sequence analysis (eg, exon 3) DAZ/SRY (deleted in azoospermia and sex determining region Y) (eg, male infertility), common deletions (eg, AZFa, AZFb, AZFc, AZFd) DNMT3A (DNA [cytosine-5-]-methyltransferase 3 alpha) (eg, acute myeloid leukemia), targeted sequence analysis (eg, exon 23) EPCAM (epithelial cell adhesion molecule) (eg, Lynch syndrome), duplication/deletion analysis F8 (coagulation factor VIII) (eg, hemophilia A), inversion analysis, intron 1 and intron 22A F12 (coagulation factor XII [Hageman factor]) (eg, angioedema, hereditary, type III; factor XII deficiency), targeted sequence analysis of exon 9 FGFR3 (fibroblast growth factor receptor 3) (eg, isolated craniosynostosis), targeted sequence analysis (eg, exon 7) (For targeted sequence analysis of multiple FGFR3 exons, use 81404) GJB1 (gap junction protein, beta 1) (eg, Charcot-Marie-Tooth X-linked), full gene sequence GNAQ (guanine nucleotide-binding protein G[q] subunit alpha) (eg, uveal melanoma), common variants (eg, R183, Q209) HBB (hemoglobin, beta, beta-globin) (eg, beta thalassemia),

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	duplication/deletion analysis Human erythrocyte antigen gene analyses (eg, SLC14A1 [Kidd blood group], BCAM [Lutheran blood group], ICAM4 [Landsteiner-Wiener blood group], SLC4A1 [Diego blood group], AQP1 [Colton blood group], ERMAP [Scianna blood group], RHCE [Rh blood group, CcEe antigens], KEL [Kell blood group], DARC [Duffy blood group], GYPA, GYPB, GYPE [MNS blood group], ART4 [Dombrock blood group]) (eg, sickle-cell disease, thalassemia, hemolytic transfusion reactions, hemolytic disease of the fetus or newborn), common variants HRAS (v-Ha-ras Harvey rat sarcoma viral oncogene homolog) (eg, Costello syndrome), exon 2 sequence IDH1 (isocitrate dehydrogenase 1 [NADP+], soluble) (eg, glioma), common exon 4 variants (eg, R132H, R132C) IDH2 (isocitrate dehydrogenase 2 [NADP+], mitochondrial) (eg, glioma), common exon 4 variants (eg, R140W, R172M) JAK2 (Janus kinase 2) (eg, myeloproliferative disorder), exon 12 sequence and exon 13 sequence, if performed KCNC3 (potassium voltage-gated channel, Shaw-related subfamily, member 3) (eg, spinocerebellar ataxia), targeted sequence analysis (eg, exon 2) KCNJ2 (potassium inwardly-rectifying channel, subfamily J, member 2) (eg, Andersen-Tawil syndrome), full gene sequence KCNJ11 (potassium inwardly-rectifying channel, subfamily J, member 11) (eg, familial hyperinsulinism), full gene sequence Killer cell immunoglobulin-like receptor (KIR) gene family (eg, hematopoietic stem cell transplantation), genotyping of KIR family genes Known familial variant not otherwise specified, for gene listed in Tier 1 or Tier 2, or identified during a genomic sequencing procedure, DNA sequence analysis, each variant exon (For a known familial variant that is considered a common variant, use specific common variant Tier 1 or Tier 2 code) MC4R (melanocortin 4 receptor) (eg, obesity), full gene sequence MICA (MHC class I polypeptide-related sequence A) (eg, solid organ transplantation), common variants (eg, *001, *002) MPL (myeloproliferative leukemia virus oncogene, thrombopoietin receptor, TPOR) (eg, myeloproliferative disorder), exon 10 sequence MT-RNR1 (mitochondrially encoded 12S RNA) (eg, nonsyndromic hearing loss), full gene sequence MT-TS1 (mitochondrially encoded tRNA serine 1) (eg, nonsyndromic hearing loss), full gene sequence NDP (Norrie disease [pseudoglioma]) (eg, Norrie disease), duplication/deletion analysis NHLRC1 (NHL repeat containing 1) (eg, progressive myoclonus epilepsy), full gene sequence PHOX2B (paired-like homeobox 2b) (eg, congenital central hypoventilation syndrome), duplication/deletion analysis PLN (phospholamban) (eg, dilated cardiomyopathy, hypertrophic cardiomyopathy), full gene sequence RHD (Rh blood group, D antigen) (eg, hemolytic disease of the fetus and newborn, Rh maternal/fetal compatibility), deletion analysis (eg, exons 4, 5, and 7, pseudogene) RHD (Rh blood group, D antigen) (eg, hemolytic disease of the fetus and newborn, Rh maternal/fetal compatibility), deletion analysis (eg, exons 4, 5, and 7, pseudogene), performed on cell-free fetal DNA in maternal blood (For human erythrocyte gene analysis of RHD, use a separate unit of 81403) SH2D1A (SH2 domain containing 1A) (eg, X-linked lymphoproliferative syndrome), duplication/deletion analysis SMN1 (survival of motor neuron 1, telomeric) (eg, spinal muscular atrophy), known familial sequence variant(s) TWIST1 (twist homolog 1 [Drosophila]) (eg, Saethre-Chotzen syndrome), duplication/deletion analysis UBA1 (ubiquitin-like modifier activating enzyme 1) (eg, spinal muscular atrophy, X-linked), targeted sequence analysis (eg, exon 15) VHL (von Hippel-Lindau tumor suppressor) (eg, von Hippel-Lindau familial cancer syndrome), deletion/duplication analysis VWF (von Willebrand factor) (eg, von Willebrand disease types 2A, 2B, 2M), targeted sequence analysis (eg, exon 28)

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81404	Molecular pathology procedure, Level 5 (eg, analysis of 2-5 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by Southern blot analysis) ACADS (acyl-CoA dehydrogenase, C-2 to C-3 short chain) (eg, short chain acyl-CoA dehydrogenase deficiency), targeted sequence analysis (eg, exons 5 and 6) AFF2 (AF4/FMR2 family, member 2 [FMR2]) (eg, fragile X mental retardation 2 [FRAXE]), characterization of alleles (eg, expanded size and methylation status) AQP2 (aquaporin 2 [collecting duct]) (eg, nephrogenic diabetes insipidus), full gene sequence ARX (aristaless related homeobox) (eg, X-linked lissencephaly with ambiguous genitalia, X-linked mental retardation), full gene sequence AVPR2 (arginine vasopressin receptor 2) (eg, nephrogenic diabetes insipidus), full gene sequence BBS10 (Bardet-Biedl syndrome 10) (eg, Bardet-Biedl syndrome), full gene sequence BTD (biotinidase) (eg, biotinidase deficiency), full gene sequence C10orf2 (chromosome 10 open reading frame 2) (eg, mitochondrial DNA depletion syndrome), full gene sequence CAV3 (caveolin 3) (eg, CAV3-related distal myopathy, limb-girdle muscular dystrophy type 1C), full gene sequence CD40LG (CD40 ligand) (eg, X-linked hyper IgM syndrome), full gene sequence CDKN2A (cyclin-dependent kinase inhibitor 2A) (eg, CDKN2A-related cutaneous malignant melanoma, familial atypical mole-malignant melanoma syndrome), full gene sequence CLRN1 (clarin 1) (eg, Usher syndrome, type 3), full gene sequence COX6B1 (cytochrome c oxidase subunit VIb polypeptide 1) (eg, mitochondrial respiratory chain complex IV deficiency), full gene sequence CPT2 (carnitine palmitoyltransferase 2) (eg, carnitine palmitoyltransferase II deficiency), full gene sequence CRX (cone-rod homeobox) (eg, cone-rod dystrophy 2, Leber congenital amaurosis), full gene sequence CSTB (cystatin B [stefin B]) (eg, Unverricht-Lundborg disease), full gene sequence CYP1B1 (cytochrome P450, family 1, subfamily B, polypeptide 1) (eg, primary congenital glaucoma), full gene sequence DMPK (dystrophia myotonica-protein kinase) (eg, myotonic dystrophy type 1), characterization of abnormal (eg, expanded) alleles EGR2 (early growth response 2) (eg, Charcot-Marie-Tooth), full gene sequence EMD (emerin) (eg, Emery-Dreifuss muscular dystrophy), duplication/deletion analysis EPM2A (epilepsy, progressive myoclonus type 2A, Lafora disease [laforin]) (eg, progressive myoclonus epilepsy), full gene sequence FGF23 (fibroblast growth factor 23) (eg, hypophosphatemic rickets), full gene sequence FGFR2 (fibroblast growth factor receptor 2) (eg, craniosynostosis, Apert syndrome, Crouzon syndrome), targeted sequence analysis (eg, exons 8, 10) FGFR3 (fibroblast growth factor receptor 3) (eg, achondroplasia, hypochondroplasia), targeted sequence analysis (eg, exons 8, 11, 12, 13) FHL1 (four and a half LIM domains 1) (eg, Emery-Dreifuss muscular dystrophy), full gene sequence FKRP (fukutin related protein) (eg, congenital muscular dystrophy type 1C [MDC1C], limb-girdle muscular dystrophy [LGMD] type 2I), full gene sequence FOXG1 (forkhead box G1) (eg, Rett syndrome), full gene sequence FSHMD1A (facioscapulohumeral muscular dystrophy 1A) (eg, facioscapulohumeral muscular dystrophy), evaluation to detect abnormal (eg, deleted) alleles FSHMD1A (facioscapulohumeral muscular dystrophy 1A) (eg, facioscapulohumeral muscular dystrophy), characterization of haplotype(s) (ie, chromosome 4A and 4B haplotypes) FXN (frataxin) (eg, Friedreich ataxia), full gene sequence GH1 (growth hormone 1) (eg, growth hormone deficiency), full gene sequence GP1BB (glycoprotein Ib [platelet], beta polypeptide) (eg, Bernard-Soulier syndrome type B), full gene sequence HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, alpha thalassemia), duplication/deletion analysis (For common deletion variants of alpha globin 1 and alpha globin 2 genes, use 81257) HBB (hemoglobin, beta, Beta-Globin) (eg, thalassemia), full gene sequence HNF1B (HNF1 homeobox B) (eg, maturity-onset diabetes of the young [MODY]), duplication/deletion analysis HRAS (v-Ha-ras Harvey rat sarcoma viral oncogene homolog) (eg, Costello syndrome), full gene sequence HSD3B2 (hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 2) (eg, 3-beta-hydroxysteroid dehydrogenase type II deficiency), full gene sequence HSD11B2 (hydroxysteroid [11-beta] dehydrogenase 2) (eg, mineralocorticoid excess syndrome), full gene sequence HSPB1 (heat shock 27kDa protein 1) (eg, Charcot-Marie-Tooth disease), full gene sequence INS (insulin) (eg, diabetes mellitus), full gene sequence KCNJ1 (potassium inwardly-rectifying channel,

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	subfamily J, member 1) (eg, Bartter syndrome), full gene sequence KCNJ10 (potassium inwardly-rectifying channel, subfamily J, member 10) (eg, SeSAME syndrome, EAST syndrome, sensorineural hearing loss), full gene sequence LITAF (lipopolysaccharide-induced TNF factor) (eg, Charcot-Marie-Tooth), full gene sequence MEFV (Mediterranean fever) (eg, familial Mediterranean fever), full gene sequence MEN1 (multiple endocrine neoplasia I) (eg, multiple endocrine neoplasia type 1, Wermer syndrome), duplication/deletion analysis MMACHC (methylmalonic aciduria [cobalamin deficiency] cblC type, with homocystinuria) (eg, methylmalonic acidemia and homocystinuria), full gene sequence MPV17 (MpV17 mitochondrial inner membrane protein) (eg, mitochondrial DNA depletion syndrome), duplication/deletion analysis NDP (Norrie disease [pseudoglioma]) (eg, Norrie disease), full gene sequence NDUFA1 (NADH dehydrogenase [ubiquinone] 1 alpha subcomplex, 1, 7.5kDa) (eg, Leigh syndrome, mitochondrial complex I deficiency), full gene sequence NDUFAF2 (NADH dehydrogenase [ubiquinone] 1 alpha subcomplex, assembly factor 2) (eg, Leigh syndrome, mitochondrial complex I deficiency), full gene sequence NDUFS4 (NADH dehydrogenase [ubiquinone] Fe-S protein 4, 18kDa [NADH-coenzyme Q reductase]) (eg, Leigh syndrome, mitochondrial complex I deficiency), full gene sequence NIPA1 (non-imprinted in Prader-Willi/Angelman syndrome 1) (eg, spastic paraplegia), full gene sequence NLGN4X (neuroligin 4, X-linked) (eg, autism spectrum disorders), duplication/deletion analysis NPC2 (Niemann-Pick disease, type C2 [epididymal secretory protein E1]) (eg, Niemann-Pick disease type C2), full gene sequence NR0B1 (nuclear receptor subfamily 0, group B, member 1) (eg, congenital adrenal hypoplasia), full gene sequence PDX1 (pancreatic and duodenal homeobox 1) (eg, maturity-onset diabetes of the young [MODY]), full gene sequence PHOX2B (paired-like homeobox 2b) (eg, congenital central hypoventilation syndrome), full gene sequence PIK3CA (phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit alpha) (eg, colorectal cancer), targeted sequence analysis (eg, exons 9 and 20) PLP1 (proteolipid protein 1) (eg, Pelizaeus-Merzbacher disease, spastic paraplegia), duplication/deletion analysis PQBP1 (polyglutamine binding protein 1) (eg, Renpenning syndrome), duplication/deletion analysis PRNP (prion protein) (eg, genetic prion disease), full gene sequence PROP1 (PROP paired-like homeobox 1) (eg, combined pituitary hormone deficiency), full gene sequence PRPH2 (peripherin 2 [retinal degeneration, slow]) (eg, retinitis pigmentosa), full gene sequence PRSS1 (protease, serine, 1 [trypsin 1]) (eg, hereditary pancreatitis), full gene sequence RAF1 (v-raf-1 murine leukemia viral oncogene homolog 1) (eg, LEOPARD syndrome), targeted sequence analysis (eg, exons 7, 12, 14, 17) RET (ret proto-oncogene) (eg, multiple endocrine neoplasia, type 2B and familial medullary thyroid carcinoma), common variants (eg, M918T, 2647_2648delinsTT, A883F) RHO (rhodopsin) (eg, retinitis pigmentosa), full gene sequence RP1 (retinitis pigmentosa 1) (eg, retinitis pigmentosa), full gene sequence SCN1B (sodium channel, voltage-gated, type I, beta) (eg, Brugada syndrome), full gene sequence SCO2 (SCO cytochrome oxidase deficient homolog 2 [SCO1L]) (eg, mitochondrial respiratory chain complex IV deficiency), full gene sequence SDHC (succinate dehydrogenase complex, subunit C, integral membrane protein, 15kDa) (eg, hereditary paraganglioma-pheochromocytoma syndrome), duplication/deletion analysis SDHD (succinate dehydrogenase complex, subunit D, integral membrane protein) (eg, hereditary paraganglioma), full gene sequence SGCG (sarcoglycan, gamma [35kDa dystrophin-associated glycoprotein]) (eg, limb-girdle muscular dystrophy), duplication/deletion analysis SH2D1A (SH2 domain containing 1A) (eg, X-linked lymphoproliferative syndrome), full gene sequence SLC16A2 (solute carrier family 16, member 2 [thyroid hormone transporter]) (eg, specific thyroid hormone cell transporter deficiency, Allan-Herndon-Dudley syndrome), duplication/deletion analysis SLC25A20 (solute carrier family 25 [carnitine/acylcarnitine translocase], member 20) (eg, carnitine-acylcarnitine translocase deficiency), duplication/deletion analysis SLC25A4 (solute carrier family 25 [mitochondrial carrier; adenine nucleotide translocator], member 4) (eg, progressive external ophthalmoplegia), full gene sequence SOD1 (superoxide dismutase 1, soluble) (eg, amyotrophic lateral sclerosis), full gene sequence SPINK1 (serine peptidase inhibitor, Kazal type 1) (eg, hereditary pancreatitis), full gene sequence STK11 (serine/threonine kinase 11) (eg, Peutz-Jeghers

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Code	**Code Description**
	syndrome), duplication/deletion analysis TACO1 (translational activator of mitochondrial encoded cytochrome c oxidase I) (eg, mitochondrial respiratory chain complex IV deficiency), full gene sequence THAP1 (THAP domain containing, apoptosis associated protein 1) (eg, torsion dystonia), full gene sequence TOR1A (torsin family 1, member A [torsin A]) (eg, torsion dystonia), full gene sequence TP53 (tumor protein 53) (eg, tumor samples), targeted sequence analysis of 2-5 exons TTPA (tocopherol [alpha] transfer protein) (eg, ataxia), full gene sequence TTR (transthyretin) (eg, familial transthyretin amyloidosis), full gene sequence TWIST1 (twist homolog 1 [Drosophila]) (eg, Saethre-Chotzen syndrome), full gene sequence TYR (tyrosinase [oculocutaneous albinism IA]) (eg, oculocutaneous albinism IA), full gene sequence USH1G (Usher syndrome 1G [autosomal recessive]) (eg, Usher syndrome, type 1), full gene sequence VHL (von Hippel-Lindau tumor suppressor) (eg, von Hippel-Lindau familial cancer syndrome), full gene sequence VWF (von Willebrand factor) (eg, von Willebrand disease type 1C), targeted sequence analysis (eg, exons 26, 27, 37) ZEB2 (zinc finger E-box binding homeobox 2) (eg, Mowat-Wilson syndrome), duplication/deletion analysis ZNF41 (zinc finger protein 41) (eg, X-linked mental retardation 89), full gene sequence
81405	Molecular pathology procedure, Level 6 (eg, analysis of 6-10 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 11-25 exons, regionally targeted cytogenomic array analysis) ABCD1 (ATP-binding cassette, sub-family D [ALD], member 1) (eg, adrenoleukodystrophy), full gene sequence ACADS (acyl-CoA dehydrogenase, C-2 to C-3 short chain) (eg, short chain acyl-CoA dehydrogenase deficiency), full gene sequence ACTA2 (actin, alpha 2, smooth muscle, aorta) (eg, thoracic aortic aneurysms and aortic dissections), full gene sequence ACTC1 (actin, alpha, cardiac muscle 1) (eg, familial hypertrophic cardiomyopathy), full gene sequence ANKRD1 (ankyrin repeat domain 1) (eg, dilated cardiomyopathy), full gene sequence APTX (aprataxin) (eg, ataxia with oculomotor apraxia 1), full gene sequence AR (androgen receptor) (eg, androgen insensitivity syndrome), full gene sequence ARSA (arylsulfatase A) (eg, arylsulfatase A deficiency), full gene sequence BCKDHA (branched chain keto acid dehydrogenase E1, alpha polypeptide) (eg, maple syrup urine disease, type 1A), full gene sequence BCS1L (BCS1-like [S. cerevisiae]) (eg, Leigh syndrome, mitochondrial complex III deficiency, GRACILE syndrome), full gene sequence BMPR2 (bone morphogenetic protein receptor, type II [serine/threonine kinase]) (eg, heritable pulmonary arterial hypertension), duplication/deletion analysis CASQ2 (calsequestrin 2 [cardiac muscle]) (eg, catecholaminergic polymorphic ventricular tachycardia), full gene sequence CASR (calcium-sensing receptor) (eg, hypocalcemia), full gene sequence CDKL5 (cyclin-dependent kinase-like 5) (eg, early infantile epileptic encephalopathy), duplication/deletion analysis CHRNA4 (cholinergic receptor, nicotinic, alpha 4) (eg, nocturnal frontal lobe epilepsy), full gene sequence CHRNB2 (cholinergic receptor, nicotinic, beta 2 [neuronal]) (eg, nocturnal frontal lobe epilepsy), full gene sequence COX10 (COX10 homolog, cytochrome c oxidase assembly protein) (eg, mitochondrial respiratory chain complex IV deficiency), full gene sequence COX15 (COX15 homolog, cytochrome c oxidase assembly protein) (eg, mitochondrial respiratory chain complex IV deficiency), full gene sequence CYP11B1 (cytochrome P450, family 11, subfamily B, polypeptide 1) (eg, congenital adrenal hyperplasia), full gene sequence CYP17A1 (cytochrome P450, family 17, subfamily A, polypeptide 1) (eg, congenital adrenal hyperplasia), full gene sequence CYP21A2 (cytochrome P450, family 21, subfamily A, polypeptide2) (eg, steroid 21-hydroxylase isoform, congenital adrenal hyperplasia), full gene sequence Cytogenomic constitutional targeted microarray analysis of chromosome 22q13 by interrogation of genomic regions for copy number and single nucleotide polymorphism (SNP) variants for chromosomal abnormalities (When performing genome-wide cytogenomic constitutional microarray analysis, see 81228, 81229) (Do not report analyte-specific molecular pathology procedures separately when the specific analytes are included as part of the microarray analysis of chromosome 22q13) (Do not report 88271 when performing cytogenomic microarray analysis) DBT (dihydrolipoamide branched chain transacylase E2) (eg, maple syrup urine disease, type 2), duplication/deletion analysis DCX (doublecortin) (eg, X-linked lissencephaly), full gene

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Code	**Code Description**
	sequence DES (desmin) (eg, myofibrillar myopathy), full gene sequence DFNB59 (deafness, autosomal recessive 59) (eg, autosomal recessive nonsyndromic hearing impairment), full gene sequence DGUOK (deoxyguanosine kinase) (eg, hepatocerebral mitochondrial DNA depletion syndrome), full gene sequence DHCR7 (7-dehydrocholesterol reductase) (eg, Smith-Lemli-Opitz syndrome), full gene sequence EIF2B2 (eukaryotic translation initiation factor 2B, subunit 2 beta, 39kDa) (eg, leukoencephalopathy with vanishing white matter), full gene sequence EMD (emerin) (eg, Emery-Dreifuss muscular dystrophy), full gene sequence ENG (endoglin) (eg, hereditary hemorrhagic telangiectasia, type 1), duplication/deletion analysis EYA1 (eyes absent homolog 1 [Drosophila]) (eg, branchio-oto-renal [BOR] spectrum disorders), duplication/deletion analysis F9 (coagulation factor IX) (eg, hemophilia B), full gene sequence FGFR1 (fibroblast growth factor receptor 1) (eg, Kallmann syndrome 2), full gene sequence FH (fumarate hydratase) (eg, fumarate hydratase deficiency, hereditary leiomyomatosis with renal cell cancer), full gene sequence FKTN (fukutin) (eg, limb-girdle muscular dystrophy [LGMD] type 2M or 2L), full gene sequence FTSJ1 (FtsJ RNA methyltransferase homolog 1 [E. coli]) (eg, X-linked mental retardation 9), duplication/deletion analysis GABRG2 (gamma-aminobutyric acid [GABA] A receptor, gamma 2) (eg, generalized epilepsy with febrile seizures), full gene sequence GCH1 (GTP cyclohydrolase 1) (eg, autosomal dominant dopa-responsive dystonia), full gene sequence GDAP1 (ganglioside-induced differentiation-associated protein 1) (eg, Charcot-Marie-Tooth disease), full gene sequence GFAP (glial fibrillary acidic protein) (eg, Alexander disease), full gene sequence GHR (growth hormone receptor) (eg, Laron syndrome), full gene sequence GHRHR (growth hormone releasing hormone receptor) (eg, growth hormone deficiency), full gene sequence GLA (galactosidase, alpha) (eg, Fabry disease), full gene sequence HBA1/HBA2 (alpha globin 1 and alpha globin 2) (eg, thalassemia), full gene sequence HNF1A (HNF1 homeobox A) (eg, maturity-onset diabetes of the young [MODY]), full gene sequence HNF1B (HNF1 homeobox B) (eg, maturity-onset diabetes of the young [MODY]), full gene sequence HTRA1 (HtrA serine peptidase 1) (eg, macular degeneration), full gene sequence IDS (iduronate 2-sulfatase) (eg, mucopolysacchridosis, type II), full gene sequence IL2RG (interleukin 2 receptor, gamma) (eg, X-linked severe combined immunodeficiency), full gene sequence ISPD (isoprenoid synthase domain containing) (eg, muscle-eye-brain disease, Walker-Warburg syndrome), full gene sequence KRAS (Kirsten rat sarcoma viral oncogene homolog) (eg, Noonan syndrome), full gene sequence LAMP2 (lysosomal-associated membrane protein 2) (eg, Danon disease), full gene sequence LDLR (low density lipoprotein receptor) (eg, familial hypercholesterolemia), duplication/deletion analysis MEN1 (multiple endocrine neoplasia I) (eg, multiple endocrine neoplasia type 1, Wermer syndrome), full gene sequence MMAA (methylmalonic aciduria [cobalamine deficiency] type A) (eg, MMAA-related methylmalonic acidemia), full gene sequence MMAB (methylmalonic aciduria [cobalamine deficiency] type B) (eg, MMAA-related methylmalonic acidemia), full gene sequence MPI (mannose phosphate isomerase) (eg, congenital disorder of glycosylation 1b), full gene sequence MPV17 (MpV17 mitochondrial inner membrane protein) (eg, mitochondrial DNA depletion syndrome), full gene sequence MPZ (myelin protein zero) (eg, Charcot-Marie-Tooth), full gene sequence MTM1 (myotubularin 1) (eg, X-linked centronuclear myopathy), duplication/deletion analysis MYL2 (myosin, light chain 2, regulatory, cardiac, slow) (eg, familial hypertrophic cardiomyopathy), full gene sequence MYL3 (myosin, light chain 3, alkali, ventricular, skeletal, slow) (eg, familial hypertrophic cardiomyopathy), full gene sequence MYOT (myotilin) (eg, limb-girdle muscular dystrophy), full gene sequence NDUFS7 (NADH dehydrogenase [ubiquinone] Fe-S protein 7, 20kDa [NADH-coenzyme Q reductase]) (eg, Leigh syndrome, mitochondrial complex I deficiency), full gene sequence NDUFS8 (NADH dehydrogenase [ubiquinone] Fe-S protein 8, 23kDa [NADH-coenzyme Q reductase]) (eg, Leigh syndrome, mitochondrial complex I deficiency), full gene sequence NDUFV1 (NADH dehydrogenase [ubiquinone] flavoprotein 1, 51kDa) (eg, Leigh syndrome, mitochondrial complex I deficiency), full gene sequence NEFL (neurofilament, light polypeptide) (eg, Charcot-Marie-Tooth), full gene sequence NF2 (neurofibromin 2 [merlin]) (eg, neurofibromatosis, type 2), duplication/deletion

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Code	**Code Description**
	analysis NLGN3 (neuroligin 3) (eg, autism spectrum disorders), full gene sequence NLGN4X (neuroligin 4, X-linked) (eg, autism spectrum disorders), full gene sequence NPHP1 (nephronophthisis 1 [juvenile]) (eg, Joubert syndrome), deletion analysis, and duplication analysis, if performed NPHS2 (nephrosis 2, idiopathic, steroid-resistant [podocin]) (eg, steroid-resistant nephrotic syndrome), full gene sequence NSD1 (nuclear receptor binding SET domain protein 1) (eg, Sotos syndrome), duplication/deletion analysis OTC (ornithine carbamoyltransferase) (eg, ornithine transcarbamylase deficiency), full gene sequence PAFAH1B1 (platelet-activating factor acetylhydrolase 1b, regulatory subunit 1 [45kDa]) (eg, lissencephaly, Miller-Dieker syndrome), duplication/deletion analysis PARK2 (Parkinson protein 2, E3 ubiquitin protein ligase [parkin]) (eg, Parkinson disease), duplication/deletion analysis PCCA (propionyl CoA carboxylase, alpha polypeptide) (eg, propionic acidemia, type 1), duplication/deletion analysis PCDH19 (protocadherin 19) (eg, epileptic encephalopathy), full gene sequence PDHA1 (pyruvate dehydrogenase [lipoamide] alpha 1) (eg, lactic acidosis), duplication/deletion analysis PDHB (pyruvate dehydrogenase [lipoamide] beta) (eg, lactic acidosis), full gene sequence PINK1 (PTEN induced putative kinase 1) (eg, Parkinson disease), full gene sequence PLP1 (proteolipid protein 1) (eg, Pelizaeus-Merzbacher disease, spastic paraplegia), full gene sequence POU1F1 (POU class 1 homeobox 1) (eg, combined pituitary hormone deficiency), full gene sequence PRX (periaxin) (eg, Charcot-Marie-Tooth disease), full gene sequence PQBP1 (polyglutamine binding protein 1) (eg, Renpenning syndrome), full gene sequence PSEN1 (presenilin 1) (eg, Alzheimer disease), full gene sequence RAB7A (RAB7A, member RAS oncogene family) (eg, Charcot-Marie-Tooth disease), full gene sequence RAI1 (retinoic acid induced 1) (eg, Smith-Magenis syndrome), full gene sequence REEP1 (receptor accessory protein 1) (eg, spastic paraplegia), full gene sequence RET (ret proto-oncogene) (eg, multiple endocrine neoplasia, type 2A and familial medullary thyroid carcinoma), targeted sequence analysis (eg, exons 10, 11, 13-16) RPS19 (ribosomal protein S19) (eg, Diamond-Blackfan anemia), full gene sequence RRM2B (ribonucleotide reductase M2 B [TP53 inducible]) (eg, mitochondrial DNA depletion), full gene sequence SCO1 (SCO cytochrome oxidase deficient homolog 1) (eg, mitochondrial respiratory chain complex IV deficiency), full gene sequence SDHB (succinate dehydrogenase complex, subunit B, iron sulfur) (eg, hereditary paraganglioma), full gene sequence SDHC (succinate dehydrogenase complex, subunit C, integral membrane protein, 15kDa) (eg, hereditary paraganglioma-pheochromocytoma syndrome), full gene sequence SGCA (sarcoglycan, alpha [50kDa dystrophin-associated glycoprotein]) (eg, limb-girdle muscular dystrophy), full gene sequence SGCB (sarcoglycan, beta [43kDa dystrophin-associated glycoprotein]) (eg, limb-girdle muscular dystrophy), full gene sequence SGCD (sarcoglycan, delta [35kDa dystrophin-associated glycoprotein]) (eg, limb-girdle muscular dystrophy), full gene sequence SGCE (sarcoglycan, epsilon) (eg, myoclonic dystonia), duplication/deletion analysis SGCG (sarcoglycan, gamma [35kDa dystrophin-associated glycoprotein]) (eg, limb-girdle muscular dystrophy), full gene sequence SHOC2 (soc-2 suppressor of clear homolog) (eg, Noonan-like syndrome with loose anagen hair), full gene sequence SHOX (short stature homeobox) (eg, Langer mesomelic dysplasia), full gene sequence SIL1 (SIL1 homolog, endoplasmic reticulum chaperone [S. cerevisiae]) (eg, ataxia), full gene sequence SLC2A1 (solute carrier family 2 [facilitated glucose transporter], member 1) (eg, glucose transporter type 1 [GLUT 1] deficiency syndrome), full gene sequence SLC16A2 (solute carrier family 16, member 2 [thyroid hormone transporter]) (eg, specific thyroid hormone cell transporter deficiency, Allan-Herndon-Dudley syndrome), full gene sequence SLC22A5 (solute carrier family 22 [organic cation/carnitine transporter], member 5) (eg, systemic primary carnitine deficiency), full gene sequence SLC25A20 (solute carrier family 25 [carnitine/acylcarnitine translocase], member 20) (eg, carnitine-acylcarnitine translocase deficiency), full gene sequence SMAD4 (SMAD family member 4) (eg, hemorrhagic telangiectasia syndrome, juvenile polyposis), duplication/deletion analysis SMN1 (survival of motor neuron 1, telomeric) (eg, spinal muscular atrophy), full gene sequence SPAST (spastin) (eg, spastic paraplegia), duplication/deletion analysis SPG7 (spastic paraplegia 7 [pure and complicated autosomal recessive]) (eg, spastic paraplegia), duplication/deletion analysis SPRED1 (sprouty-related, EVH1 domain

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Code	**Code Description**
	containing 1) (eg, Legius syndrome), full gene sequence STAT3 (signal transducer and activator of transcription 3 [acute-phase response factor]) (eg, autosomal dominant hyper-IgE syndrome), targeted sequence analysis (eg, exons 12, 13, 14, 16, 17, 20, 21) STK11 (serine/threonine kinase 11) (eg, Peutz-Jeghers syndrome), full gene sequence SURF1 (surfeit 1) (eg, mitochondrial respiratory chain complex IV deficiency), full gene sequence TARDBP (TAR DNA binding protein) (eg, amyotrophic lateral sclerosis), full gene sequence TBX5 (T-box 5) (eg, Holt-Oram syndrome), full gene sequence TCF4 (transcription factor 4) (eg, Pitt-Hopkins syndrome), duplication/deletion analysis TGFBR1 (transforming growth factor, beta receptor 1) (eg, Marfan syndrome), full gene sequence TGFBR2 (transforming growth factor, beta receptor 2) (eg, Marfan syndrome), full gene sequence THRB (thyroid hormone receptor, beta) (eg, thyroid hormone resistance, thyroid hormone beta receptor deficiency), full gene sequence or targeted sequence analysis of >5 exons TK2 (thymidine kinase 2, mitochondrial) (eg, mitochondrial DNA depletion syndrome), full gene sequence TNNC1 (troponin C type 1 [slow]) (eg, hypertrophic cardiomyopathy or dilated cardiomyopathy), full gene sequence TNNI3 (troponin I, type 3 [cardiac]) (eg, familial hypertrophic cardiomyopathy), full gene sequence TP53 (tumor protein 53) (eg, Li-Fraumeni syndrome, tumor samples), full gene sequence or targeted sequence analysis of >5 exons TPM1 (tropomyosin 1 [alpha]) (eg, familial hypertrophic cardiomyopathy), full gene sequence TSC1 (tuberous sclerosis 1) (eg, tuberous sclerosis), duplication/deletion analysis TYMP (thymidine phosphorylase) (eg, mitochondrial DNA depletion syndrome), full gene sequence VWF (von Willebrand factor) (eg, von Willebrand disease type 2N), targeted sequence analysis (eg, exons 18-20, 23-25) WT1 (Wilms tumor 1) (eg, Denys-Drash syndrome, familial Wilms tumor), full gene sequence ZEB2 (zinc finger E-box binding homeobox 2) (eg, Mowat-Wilson syndrome), full gene sequence

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Code	**Code Description**
81406	Molecular pathology procedure, Level 7 (eg, analysis of 11-25 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 26-50 exons, cytogenomic array analysis for neoplasia) ACADVL (acyl-CoA dehydrogenase, very long chain) (eg, very long chain acyl-coenzyme A dehydrogenase deficiency), full gene sequence ACTN4 (actinin, alpha 4) (eg, focal segmental glomerulosclerosis), full gene sequence AFG3L2 (AFG3 ATPase family gene 3-like 2 [S. cerevisiae]) (eg, spinocerebellar ataxia), full gene sequence AIRE (autoimmune regulator) (eg, autoimmune polyendocrinopathy syndrome type 1), full gene sequence ALDH7A1 (aldehyde dehydrogenase 7 family, member A1) (eg, pyridoxine-dependent epilepsy), full gene sequence ANO5 (anoctamin 5) (eg, limb-girdle muscular dystrophy), full gene sequence APP (amyloid beta [A4] precursor protein) (eg, Alzheimer disease), full gene sequence ASS1 (argininosuccinate synthase 1) (eg, citrullinemia type I), full gene sequence ATL1 (atlastin GTPase 1) (eg, spastic paraplegia), full gene sequence ATP1A2 (ATPase, Na+/K+ transporting, alpha 2 polypeptide) (eg, familial hemiplegic migraine), full gene sequence ATP7B (ATPase, Cu++ transporting, beta polypeptide) (eg, Wilson disease), full gene sequence BBS1 (Bardet-Biedl syndrome 1) (eg, Bardet-Biedl syndrome), full gene sequence BBS2 (Bardet-Biedl syndrome 2) (eg, Bardet-Biedl syndrome), full gene sequence BCKDHB (branched-chain keto acid dehydrogenase E1, beta polypeptide) (eg, maple syrup urine disease, type 1B), full gene sequence BEST1 (bestrophin 1) (eg, vitelliform macular dystrophy), full gene sequence BMPR2 (bone morphogenetic protein receptor, type II [serine/threonine kinase]) (eg, heritable pulmonary arterial hypertension), full gene sequence BRAF (B-Raf proto-oncogene, serine/threonine kinase) (eg, Noonan syndrome), full gene sequence BSCL2 (Berardinelli-Seip congenital lipodystrophy 2 [seipin]) (eg, Berardinelli-Seip congenital lipodystrophy), full gene sequence BTK (Bruton agammaglobulinemia tyrosine kinase) (eg, X-linked agammaglobulinemia), full gene sequence CACNB2 (calcium channel, voltage-dependent, beta 2 subunit) (eg, Brugada syndrome), full gene sequence CAPN3 (calpain 3) (eg, limb-girdle muscular dystrophy [LGMD] type 2A, calpainopathy), full gene sequence CBS (cystathionine-beta-synthase) (eg, homocystinuria, cystathionine beta-synthase deficiency), full gene sequence CDH1 (cadherin 1, type 1, E-cadherin [epithelial]) (eg, hereditary diffuse gastric cancer), full gene sequence CDKL5 (cyclin-dependent kinase-like 5) (eg, early infantile epileptic encephalopathy), full gene sequence CLCN1 (chloride channel 1, skeletal muscle) (eg, myotonia congenita), full gene sequence CLCNKB (chloride channel, voltage-sensitive Kb) (eg, Bartter syndrome 3 and 4b), full gene sequence CNTNAP2 (contactin-associated protein-like 2) (eg, Pitt-Hopkins-like syndrome 1), full gene sequence COL6A2 (collagen, type VI, alpha 2) (eg, collagen type VI-related disorders), duplication/deletion analysis CPT1A (carnitine palmitoyltransferase 1A [liver]) (eg, carnitine palmitoyltransferase 1A [CPT1A] deficiency), full gene sequence CRB1 (crumbs homolog 1 [Drosophila]) (eg, Leber congenital amaurosis), full gene sequence CREBBP (CREB binding protein) (eg, Rubinstein-Taybi syndrome), duplication/deletion analysis Cytogenomic microarray analysis, neoplasia (eg, interrogation of copy number, and loss-of-heterozygosity via single nucleotide polymorphism [SNP]-based comparative genomic hybridization [CGH] microarray analysis) (Do not report analyte-specific molecular pathology procedures separately when the specific analytes are included as part of the cytogenomic microarray analysis for neoplasia) (Do not report 88271 when performing cytogenomic microarray analysis) DBT (dihydrolipoamide branched chain transacylase E2) (eg, maple syrup urine disease, type 2), full gene sequence DLAT (dihydrolipoamide S-acetyltransferase) (eg, pyruvate dehydrogenase E2 deficiency), full gene sequence DLD (dihydrolipoamide dehydrogenase) (eg, maple syrup urine disease, type III), full gene sequence DSC2 (desmocollin) (eg, arrhythmogenic right ventricular dysplasia/cardiomyopathy 11), full gene sequence DSG2 (desmoglein 2) (eg, arrhythmogenic right ventricular dysplasia/cardiomyopathy 10), full gene sequence DSP (desmoplakin) (eg, arrhythmogenic right ventricular dysplasia/cardiomyopathy 8), full gene sequence EFHC1 (EF-hand domain [C-terminal] containing 1) (eg, juvenile myoclonic epilepsy), full gene sequence EIF2B3 (eukaryotic translation initiation factor 2B, subunit 3 gamma, 58kDa) (eg, leukoencephalopathy with vanishing white matter), full gene sequence EIF2B4 (eukaryotic translation initiation factor 2B, subunit 4 delta, 67kDa) (eg,

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Code	**Code Description**
	leukoencephalopathy with vanishing white matter), full gene sequence EIF2B5 (eukaryotic translation initiation factor 2B, subunit 5 epsilon, 82kDa) (eg, childhood ataxia with central nervous system hypomyelination/vanishing white matter), full gene sequence ENG (endoglin) (eg, hereditary hemorrhagic telangiectasia, type 1), full gene sequence EYA1 (eyes absent homolog 1 [Drosophila]) (eg, branchio-oto-renal [BOR] spectrum disorders), full gene sequence F8 (coagulation factor VIII) (eg, hemophilia A), duplication/deletion analysis FAH (fumarylacetoacetate hydrolase [fumarylacetoacetase]) (eg, tyrosinemia, type 1), full gene sequence FASTKD2 (FAST kinase domains 2) (eg, mitochondrial respiratory chain complex IV deficiency), full gene sequence FIG4 (FIG4 homolog, SAC1 lipid phosphatase domain containing [S. cerevisiae]) (eg, Charcot-Marie-Tooth disease), full gene sequence FTSJ1 (FtsJ RNA methyltransferase homolog 1 [E. coli]) (eg, X-linked mental retardation 9), full gene sequence FUS (fused in sarcoma) (eg, amyotrophic lateral sclerosis), full gene sequence GAA (glucosidase, alpha; acid) (eg, glycogen storage disease type II [Pompe disease]), full gene sequence GALC (galactosylceramidase) (eg, Krabbe disease), full gene sequence GALT (galactose-1-phosphate uridylyltransferase) (eg, galactosemia), full gene sequence GARS (glycyl-tRNA synthetase) (eg, Charcot-Marie-Tooth disease), full gene sequence GCDH (glutaryl-CoA dehydrogenase) (eg, glutaricacidemia type 1), full gene sequence GCK (glucokinase [hexokinase 4]) (eg, maturity-onset diabetes of the young [MODY]), full gene sequence GLUD1 (glutamate dehydrogenase 1) (eg, familial hyperinsulinism), full gene sequence GNE (glucosamine [UDP-N-acetyl]-2-epimerase/N-acetylmannosamine kinase) (eg, inclusion body myopathy 2 [IBM2], Nonaka myopathy), full gene sequence GRN (granulin) (eg, frontotemporal dementia), full gene sequence HADHA (hydroxyacyl-CoA dehydrogenase/3-ketoacyl-CoA thiolase/enoyl-CoA hydratase [trifunctional protein] alpha subunit) (eg, long chain acyl-coenzyme A dehydrogenase deficiency), full gene sequence HADHB (hydroxyacyl-CoA dehydrogenase/3-ketoacyl-CoA thiolase/enoyl-CoA hydratase [trifunctional protein], beta subunit) (eg, trifunctional protein deficiency), full gene sequence HEXA (hexosaminidase A, alpha polypeptide) (eg, Tay-Sachs disease), full gene sequence HLCS (HLCS holocarboxylase synthetase) (eg, holocarboxylase synthetase deficiency), full gene sequence HNF4A (hepatocyte nuclear factor 4, alpha) (eg, maturity-onset diabetes of the young [MODY]), full gene sequence IDUA (iduronidase, alpha-L-) (eg, mucopolysaccharidosis type I), full gene sequence INF2 (inverted formin, FH2 and WH2 domain containing) (eg, focal segmental glomerulosclerosis), full gene sequence IVD (isovaleryl-CoA dehydrogenase) (eg, isovaleric acidemia), full gene sequence JAG1 (jagged 1) (eg, Alagille syndrome), duplication/deletion analysis JUP (junction plakoglobin) (eg, arrhythmogenic right ventricular dysplasia/cardiomyopathy 11), full gene sequence KAL1 (Kallmann syndrome 1 sequence) (eg, Kallmann syndrome), full gene sequence KCNH2 (potassium voltage-gated channel, subfamily H [eag-related], member 2) (eg, short QT syndrome, long QT syndrome), full gene sequence KCNQ1 (potassium voltage-gated channel, KQT-like subfamily, member 1) (eg, short QT syndrome, long QT syndrome), full gene sequence KCNQ2 (potassium voltage-gated channel, KQT-like subfamily, member 2) (eg, epileptic encephalopathy), full gene sequence LDB3 (LIM domain binding 3) (eg, familial dilated cardiomyopathy, myofibrillar myopathy), full gene sequence LDLR (low density lipoprotein receptor) (eg, familial hypercholesterolemia), full gene sequence LEPR (leptin receptor) (eg, obesity with hypogonadism), full gene sequence LHCGR (luteinizing hormone/choriogonadotropin receptor) (eg, precocious male puberty), full gene sequence LMNA (lamin A/C) (eg, Emery-Dreifuss muscular dystrophy [EDMD1, 2 and 3] limb-girdle muscular dystrophy [LGMD] type 1B, dilated cardiomyopathy [CMD1A], familial partial lipodystrophy [FPLD2]), full gene sequence LRP5 (low density lipoprotein receptor-related protein 5) (eg, osteopetrosis), full gene sequence MAP2K1 (mitogen-activated protein kinase 1) (eg, cardiofaciocutaneous syndrome), full gene sequence MAP2K2 (mitogen-activated protein kinase 2) (eg, cardiofaciocutaneous syndrome), full gene sequence MAPT (microtubule-associated protein tau) (eg, frontotemporal dementia), full gene sequence MCCC1 (methylcrotonoyl-CoA carboxylase 1 [alpha]) (eg, 3-methylcrotonyl-CoA carboxylase deficiency), full gene sequence MCCC2 (methylcrotonoyl-CoA

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	carboxylase 2 [beta]) (eg, 3-methylcrotonyl carboxylase deficiency), full gene sequence MFN2 (mitofusin 2) (eg, Charcot-Marie-Tooth disease), full gene sequence MTM1 (myotubularin 1) (eg, X-linked centronuclear myopathy), full gene sequence MUT (methylmalonyl CoA mutase) (eg, methylmalonic acidemia), full gene sequence MUTYH (mutY homolog [E. coli]) (eg, MYH-associated polyposis), full gene sequence NDUFS1 (NADH dehydrogenase [ubiquinone] Fe-S protein 1, 75kDa [NADH-coenzyme Q reductase]) (eg, Leigh syndrome, mitochondrial complex I deficiency), full gene sequence NF2 (neurofibromin 2 [merlin]) (eg, neurofibromatosis, type 2), full gene sequence NOTCH3 (notch 3) (eg, cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy [CADASIL]), targeted sequence analysis (eg, exons 1-23) NPC1 (Niemann-Pick disease, type C1) (eg, Niemann-Pick disease), full gene sequence NPHP1 (nephronophthisis 1 [juvenile]) (eg, Joubert syndrome), full gene sequence NSD1 (nuclear receptor binding SET domain protein 1) (eg, Sotos syndrome), full gene sequence OPA1 (optic atrophy 1) (eg, optic atrophy), duplication/deletion analysis OPTN (optineurin) (eg, amyotrophic lateral sclerosis), full gene sequence PAFAH1B1 (platelet-activating factor acetylhydrolase 1b, regulatory subunit 1 [45kDa]) (eg, lissencephaly, Miller-Dieker syndrome), full gene sequence PAH (phenylalanine hydroxylase) (eg, phenylketonuria), full gene sequence PALB2 (partner and localizer of BRCA2) (eg, breast and pancreatic cancer), full gene sequence PARK2 (Parkinson protein 2, E3 ubiquitin protein ligase [parkin]) (eg, Parkinson disease), full gene sequence PAX2 (paired box 2) (eg, renal coloboma syndrome), full gene sequence PC (pyruvate carboxylase) (eg, pyruvate carboxylase deficiency), full gene sequence PCCA (propionyl CoA carboxylase, alpha polypeptide) (eg, propionic acidemia, type 1), full gene sequence PCCB (propionyl CoA carboxylase, beta polypeptide) (eg, propionic acidemia), full gene sequence PCDH15 (protocadherin-related 15) (eg, Usher syndrome type 1F), duplication/deletion analysis PCSK9 (proprotein convertase subtilisin/kexin type 9) (eg, familial hypercholesterolemia), full gene sequence PDHA1 (pyruvate dehydrogenase [lipoamide] alpha 1) (eg, lactic acidosis), full gene sequence PDHX (pyruvate dehydrogenase complex, component X) (eg, lactic acidosis), full gene sequence PHEX (phosphate-regulating endopeptidase homolog, X-linked) (eg, hypophosphatemic rickets), full gene sequence PKD2 (polycystic kidney disease 2 [autosomal dominant]) (eg, polycystic kidney disease), full gene sequence PKP2 (plakophilin 2) (eg, arrhythmogenic right ventricular dysplasia/cardiomyopathy 9), full gene sequence PNKD (paroxysmal nonkinesigenic dyskinesia) (eg, paroxysmal nonkinesigenic dyskinesia), full gene sequence POLG (polymerase [DNA directed], gamma) (eg, Alpers-Huttenlocher syndrome, autosomal dominant progressive external ophthalmoplegia), full gene sequence POMGNT1 (protein O-linked mannose beta1,2-N acetylglucosaminyltransferase) (eg, muscle-eye-brain disease, Walker-Warburg syndrome), full gene sequence POMT1 (protein-O-mannosyltransferase 1) (eg, limb-girdle muscular dystrophy [LGMD] type 2K, Walker-Warburg syndrome), full gene sequence POMT2 (protein-O-mannosyltransferase 2) (eg, limb-girdle muscular dystrophy [LGMD] type 2N, Walker-Warburg syndrome), full gene sequence PRKAG2 (protein kinase, AMP-activated, gamma 2 non-catalytic subunit) (eg, familial hypertrophic cardiomyopathy with Wolff-Parkinson-White syndrome, lethal congenital glycogen storage disease of heart), full gene sequence PRKCG (protein kinase C, gamma) (eg, spinocerebellar ataxia), full gene sequence PSEN2 (presenilin 2 [Alzheimer disease 4]) (eg, Alzheimer disease), full gene sequence PTPN11 (protein tyrosine phosphatase, non-receptor type 11) (eg, Noonan syndrome, LEOPARD syndrome), full gene sequence PYGM (phosphorylase, glycogen, muscle) (eg, glycogen storage disease type V, McArdle disease), full gene sequence RAF1 (v-raf-1 murine leukemia viral oncogene homolog 1) (eg, LEOPARD syndrome), full gene sequence RET (ret proto-oncogene) (eg, Hirschsprung disease), full gene sequence RPE65 (retinal pigment epithelium-specific protein 65kDa) (eg, retinitis pigmentosa, Leber congenital amaurosis), full gene sequence RYR1 (ryanodine receptor 1, skeletal) (eg, malignant hyperthermia), targeted sequence analysis of exons with functionally-confirmed mutations SCN4A (sodium channel, voltage-gated, type IV, alpha subunit) (eg, hyperkalemic periodic paralysis), full gene sequence SCNN1A (sodium channel, nonvoltage-gated 1 alpha) (eg,

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Code	**Code Description**
	pseudohypoaldosteronism), full gene sequence SCNN1B (sodium channel, nonvoltage-gated 1, beta) (eg, Liddle syndrome, pseudohypoaldosteronism), full gene sequence SCNN1G (sodium channel, nonvoltage-gated 1, gamma) (eg, Liddle syndrome, pseudohypoaldosteronism), full gene sequence SDHA (succinate dehydrogenase complex, subunit A, flavoprotein [Fp]) (eg, Leigh syndrome, mitochondrial complex II deficiency), full gene sequence SETX (senataxin) (eg, ataxia), full gene sequence SGCE (sarcoglycan, epsilon) (eg, myoclonic dystonia), full gene sequence SH3TC2 (SH3 domain and tetratricopeptide repeats 2) (eg, Charcot-Marie-Tooth disease), full gene sequence SLC9A6 (solute carrier family 9 [sodium/hydrogen exchanger], member 6) (eg, Christianson syndrome), full gene sequence SLC26A4 (solute carrier family 26, member 4) (eg, Pendred syndrome), full gene sequence SLC37A4 (solute carrier family 37 [glucose-6-phosphate transporter], member 4) (eg, glycogen storage disease type Ib), full gene sequence SMAD4 (SMAD family member 4) (eg, hemorrhagic telangiectasia syndrome, juvenile polyposis), full gene sequence SOS1 (son of sevenless homolog 1) (eg, Noonan syndrome, gingival fibromatosis), full gene sequence SPAST (spastin) (eg, spastic paraplegia), full gene sequence SPG7 (spastic paraplegia 7 [pure and complicated autosomal recessive]) (eg, spastic paraplegia), full gene sequence STXBP1 (syntaxin-binding protein 1) (eg, epileptic encephalopathy), full gene sequence TAZ (tafazzin) (eg, methylglutaconic aciduria type 2, Barth syndrome), full gene sequence TCF4 (transcription factor 4) (eg, Pitt-Hopkins syndrome), full gene sequence TH (tyrosine hydroxylase) (eg, Segawa syndrome), full gene sequence TMEM43 (transmembrane protein 43) (eg, arrhythmogenic right ventricular cardiomyopathy), full gene sequence TNNT2 (troponin T, type 2 [cardiac]) (eg, familial hypertrophic cardiomyopathy), full gene sequence TRPC6 (transient receptor potential cation channel, subfamily C, member 6) (eg, focal segmental glomerulosclerosis), full gene sequence TSC1 (tuberous sclerosis 1) (eg, tuberous sclerosis), full gene sequence TSC2 (tuberous sclerosis 2) (eg, tuberous sclerosis), duplication/deletion analysis UBE3A (ubiquitin protein ligase E3A) (eg, Angelman syndrome), full gene sequence UMOD (uromodulin) (eg, glomerulocystic kidney disease with hyperuricemia and isosthenuria), full gene sequence VWF (von Willebrand factor) (von Willebrand disease type 2A), extended targeted sequence analysis (eg, exons 11-16, 24-26, 51, 52) WAS (Wiskott-Aldrich syndrome [eczema-thrombocytopenia]) (eg, Wiskott-Aldrich syndrome), full gene sequence

A-8 Molecular Genetic Lab	
Code	**Code Description**
81407	Molecular pathology procedure, Level 8 (eg, analysis of 26-50 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of >50 exons, sequence analysis of multiple genes on one platform) ABCC8 (ATP-binding cassette, sub-family C [CFTR/MRP], member 8) (eg, familial hyperinsulinism), full gene sequence AGL (amylo-alpha-1, 6-glucosidase, 4-alpha-glucanotransferase) (eg, glycogen storage disease type III), full gene sequence AHI1 (Abelson helper integration site 1) (eg, Joubert syndrome), full gene sequence ASPM (asp [abnormal spindle] homolog, microcephaly associated [Drosophila]) (eg, primary microcephaly), full gene sequence CACNA1A (calcium channel, voltage-dependent, P/Q type, alpha 1A subunit) (eg, familial hemiplegic migraine), full gene sequence CHD7 (chromodomain helicase DNA binding protein 7) (eg, CHARGE syndrome), full gene sequence COL4A4 (collagen, type IV, alpha 4) (eg, Alport syndrome), full gene sequence COL4A5 (collagen, type IV, alpha 5) (eg, Alport syndrome), duplication/deletion analysis COL6A1 (collagen, type VI, alpha 1) (eg, collagen type VI-related disorders), full gene sequence COL6A2 (collagen, type VI, alpha 2) (eg, collagen type VI-related disorders), full gene sequence COL6A3 (collagen, type VI, alpha 3) (eg, collagen type VI-related disorders), full gene sequence CREBBP (CREB binding protein) (eg, Rubinstein-Taybi syndrome), full gene sequence F8 (coagulation factor VIII) (eg, hemophilia A), full gene sequence JAG1 (jagged 1) (eg, Alagille syndrome), full gene sequence KDM5C (lysine [K]-specific demethylase 5C) (eg, X-linked mental retardation), full gene sequence KIAA0196 (KIAA0196) (eg, spastic paraplegia), full gene sequence L1CAM (L1 cell adhesion molecule) (eg, MASA syndrome, X-linked hydrocephaly), full gene sequence LAMB2 (laminin, beta 2 [laminin S]) (eg, Pierson syndrome), full gene sequence MYBPC3 (myosin binding protein C, cardiac) (eg, familial hypertrophic cardiomyopathy), full gene sequence MYH6 (myosin, heavy chain 6, cardiac muscle, alpha) (eg, familial dilated cardiomyopathy), full gene sequence MYH7 (myosin, heavy chain 7, cardiac muscle, beta) (eg, familial hypertrophic cardiomyopathy, Liang distal myopathy), full gene sequence MYO7A (myosin VIIA) (eg, Usher syndrome, type 1), full gene sequence NOTCH1 (notch 1) (eg, aortic valve disease), full gene sequence NPHS1 (nephrosis 1, congenital, Finnish type [nephrin]) (eg, congenital Finnish nephrosis), full gene sequence OPA1 (optic atrophy 1) (eg, optic atrophy), full gene sequence PCDH15 (protocadherin-related 15) (eg, Usher syndrome, type 1), full gene sequence PKD1 (polycystic kidney disease 1 [autosomal dominant]) (eg, polycystic kidney disease), full gene sequence PLCE1 (phospholipase C, epsilon 1) (eg, nephrotic syndrome type 3), full gene sequence SCN1A (sodium channel, voltage-gated, type 1, alpha subunit) (eg, generalized epilepsy with febrile seizures), full gene sequence SCN5A (sodium channel, voltage-gated, type V, alpha subunit) (eg, familial dilated cardiomyopathy), full gene sequence SLC12A1 (solute carrier family 12 [sodium/potassium/chloride transporters], member 1) (eg, Bartter syndrome), full gene sequence SLC12A3 (solute carrier family 12 [sodium/chloride transporters], member 3) (eg, Gitelman syndrome), full gene sequence SPG11 (spastic paraplegia 11 [autosomal recessive]) (eg, spastic paraplegia), full gene sequence SPTBN2 (spectrin, beta, non-erythrocytic 2) (eg, spinocerebellar ataxia), full gene sequence TMEM67 (transmembrane protein 67) (eg, Joubert syndrome), full gene sequence TSC2 (tuberous sclerosis 2) (eg, tuberous sclerosis), full gene sequence USH1C (Usher syndrome 1C [autosomal recessive, severe]) (eg, Usher syndrome, type 1), full gene sequence VPS13B (vacuolar protein sorting 13 homolog B [yeast]) (eg, Cohen syndrome), duplication/deletion analysis WDR62 (WD repeat domain 62) (eg, primary autosomal recessive microcephaly), full gene sequence

A-8 Molecular Genetic Lab	
Code	**Code Description**
81408	Molecular pathology procedure, Level 9 (eg, analysis of >50 exons in a single gene by DNA sequence analysis) ABCA4 (ATP-binding cassette, sub-family A [ABC1], member 4) (eg, Stargardt disease, age-related macular degeneration), full gene sequence ATM (ataxia telangiectasia mutated) (eg, ataxia telangiectasia), full gene sequence CDH23 (cadherin-related 23) (eg, Usher syndrome, type 1), full gene sequence CEP290 (centrosomal protein 290kDa) (eg, Joubert syndrome), full gene sequence COL1A1 (collagen, type I, alpha 1) (eg, osteogenesis imperfecta, type I), full gene sequence COL1A2 (collagen, type I, alpha 2) (eg, osteogenesis imperfecta, type I), full gene sequence COL4A1 (collagen, type IV, alpha 1) (eg, brain small-vessel disease with hemorrhage), full gene sequence COL4A3 (collagen, type IV, alpha 3 [Goodpasture antigen]) (eg, Alport syndrome), full gene sequence COL4A5 (collagen, type IV, alpha 5) (eg, Alport syndrome), full gene sequence DMD (dystrophin) (eg, Duchenne/Becker muscular dystrophy), full gene sequence DYSF (dysferlin, limb girdle muscular dystrophy 2B [autosomal recessive]) (eg, limb-girdle muscular dystrophy), full gene sequence FBN1 (fibrillin 1) (eg, Marfan syndrome), full gene sequence ITPR1 (inositol 1,4,5-trisphosphate receptor, type 1) (eg, spinocerebellar ataxia), full gene sequence LAMA2 (laminin, alpha 2) (eg, congenital muscular dystrophy), full gene sequence LRRK2 (leucine-rich repeat kinase 2) (eg, Parkinson disease), full gene sequence MYH11 (myosin, heavy chain 11, smooth muscle) (eg, thoracic aortic aneurysms and aortic dissections), full gene sequence NEB (nebulin) (eg, nemaline myopathy 2), full gene sequence NF1 (neurofibromin 1) (eg, neurofibromatosis, type 1), full gene sequence PKHD1 (polycystic kidney and hepatic disease 1) (eg, autosomal recessive polycystic kidney disease), full gene sequence RYR1 (ryanodine receptor 1, skeletal) (eg, malignant hyperthermia), full gene sequence RYR2 (ryanodine receptor 2 [cardiac]) (eg, catecholaminergic polymorphic ventricular tachycardia, arrhythmogenic right ventricular dysplasia), full gene sequence or targeted sequence analysis of > 50 exons USH2A (Usher syndrome 2A [autosomal recessive, mild]) (eg, Usher syndrome, type 2), full gene sequence VPS13B (vacuolar protein sorting 13 homolog B [yeast]) (eg, Cohen syndrome), full gene sequence VWF (von Willebrand factor) (eg, von Willebrand disease types 1 and 3), full gene sequence
81410	Aortic dysfunction or dilation (eg, Marfan syndrome, Loeys Dietz syndrome, Ehler Danlos syndrome type IV, arterial tortuosity syndrome); genomic sequence analysis panel, must include sequencing of at least 9 genes, including FBN1, TGFBR1, TGFBR2, COL3A1, MYH11, ACTA2, SLC2A10, SMAD3, and MYLK
81411	Aortic dysfunction or dilation (eg, Marfan syndrome, Loeys Dietz syndrome, Ehler Danlos syndrome type IV, arterial tortuosity syndrome); duplication/deletion analysis panel, must include analyses for TGFBR1, TGFBR2, MYH11, and COL3A1
81412	Ashkenazi Jewish associated disorders (eg, Bloom syndrome, Canavan disease, cystic fibrosis, familial dysautonomia, Fanconi anemia group C, Gaucher disease, Tay-Sachs disease), genomic sequence analysis panel, must include sequencing of at least 9 genes, including ASPA, BLM, CFTR, FANCC, GBA, HEXA, IKBKAP, MCOLN1, and SMPD1
81413	Cardiac ion channelopathies (eg, Brugada syndrome, long QT syndrome, short QT syndrome, catecholaminergic polymorphic ventricular tachycardia); genomic sequence analysis panel, must include sequencing of at least 10 genes, including ANK2, CASQ2, CAV3, KCNE1, KCNE2, KCNH2, KCNJ2, KCNQ1, RYR2, and SCN5A
81414	Cardiac ion channelopathies (eg, Brugada syndrome, long QT syndrome, short QT syndrome, catecholaminergic polymorphic ventricular tachycardia); duplication/deletion gene analysis panel, must include analysis of at least 2 genes, including KCNH2 and KCNQ1
81415	Exome (eg, unexplained constitutional or heritable disorder or syndrome); sequence analysis
81416	Exome (eg, unexplained constitutional or heritable disorder or syndrome); sequence analysis, each comparator exome (eg, parents, siblings) (List separately in addition to code for primary procedure)

A-8 Molecular Genetic Lab	
Code	**Code Description**
81417	Exome (eg, unexplained constitutional or heritable disorder or syndrome); re-evaluation of previously obtained exome sequence (eg, updated knowledge or unrelated condition/syndrome)
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
81425	Genome (eg, unexplained constitutional or heritable disorder or syndrome); sequence analysis
81426	Genome (eg, unexplained constitutional or heritable disorder or syndrome); sequence analysis, each comparator genome (eg, parents, siblings) (List separately in addition to code for primary procedure)
81427	Genome (eg, unexplained constitutional or heritable disorder or syndrome); re-evaluation of previously obtained genome sequence (eg, updated knowledge or unrelated condition/syndrome)
81430	Hearing loss (eg, nonsyndromic hearing loss, Usher syndrome, Pendred syndrome); genomic sequence analysis panel, must include sequencing of at least 60 genes, including CDH23, CLRN1, GJB2, GPR98, MTRNR1, MYO7A, MYO15A, PCDH15, OTOF, SLC26A4, TMC1, TMPRSS3, USH1C, USH1G, USH2A, and WFS1
81431	Hearing loss (eg, nonsyndromic hearing loss, Usher syndrome, Pendred syndrome); duplication/deletion analysis panel, must include copy number analyses for STRC and DFNB1 deletions in GJB2 and GJB6 genes
81432	Hereditary breast cancer-related disorders (eg, hereditary breast cancer, hereditary ovarian cancer, hereditary endometrial cancer); genomic sequence analysis panel, must include sequencing of at least 14 genes, including ATM, BRCA1, BRCA2, BRIP1, CDH1, MLH1, MSH2, MSH6, NBN, PALB2, PTEN, RAD51C, STK11, and TP53
81433	Hereditary breast cancer-related disorders (eg, hereditary breast cancer, hereditary ovarian cancer, hereditary endometrial cancer); duplication/deletion analysis panel, must include analyses for BRCA1, BRCA2, MLH1, MSH2, and STK11
81434	Hereditary retinal disorders (eg, retinitis pigmentosa, Leber congenital amaurosis, cone-rod dystrophy), genomic sequence analysis panel, must include sequencing of at least 15 genes, including ABCA4, CNGA1, CRB1, EYS, PDE6A, PDE6B, PRPF31, PRPH2, RDH12, RHO, RP1, RP2, RPE65, RPGR, and USH2A
81435	Hereditary colon cancer disorders (eg, Lynch syndrome, PTEN hamartoma syndrome, Cowden syndrome, familial adenomatosis polyposis); genomic sequence analysis panel, must include sequencing of at least 10 genes, including APC, BMPR1A, CDH1, MLH1, MSH2, MSH6, MUTYH, PTEN, SMAD4, and STK11
81436	Hereditary colon cancer disorders (eg, Lynch syndrome, PTEN hamartoma syndrome, Cowden syndrome, familial adenomatosis polyposis); duplication/deletion analysis panel, must include analysis of at least 5 genes, including MLH1, MSH2, EPCAM, SMAD4, and STK11
81437	Hereditary neuroendocrine tumor disorders (eg, medullary thyroid carcinoma, parathyroid carcinoma, malignant pheochromocytoma or paraganglioma); genomic sequence analysis panel, must include sequencing of at least 6 genes, including MAX, SDHB, SDHC, SDHD, TMEM127, and VHL
81438	Hereditary neuroendocrine tumor disorders (eg, medullary thyroid carcinoma, parathyroid carcinoma, malignant pheochromocytoma or paraganglioma); duplication/deletion analysis panel, must include analyses for SDHB, SDHC, SDHD, and VHL
81439	Inherited cardiomyopathy (eg, hypertrophic cardiomyopathy, dilated cardiomyopathy, arrhythmogenic right ventricular cardiomyopathy) genomic sequence analysis panel, must include sequencing of at least 5 genes, including DSG2, MYBPC3, MYH7, PKP2, and TTN

A-8 Molecular Genetic Lab	
Code	**Code Description**
81440	Nuclear encoded mitochondrial genes (eg, neurologic or myopathic phenotypes), genomic sequence panel, must include analysis of at least 100 genes, including BCS1L, C10orf2, COQ2, COX10, DGUOK, MPV17, OPA1, PDSS2, POLG, POLG2, RRM2B, SCO1, SCO2, SLC25A4, SUCLA2, SUCLG1, TAZ, TK2, and TYMP
81442	Noonan spectrum disorders (eg, Noonan syndrome, cardio-facio-cutaneous syndrome, Costello syndrome, LEOPARD syndrome, Noonan-like syndrome), genomic sequence analysis panel, must include sequencing of at least 12 genes, including BRAF, CBL, HRAS, KRAS, MAP2K1, MAP2K2, NRAS, PTPN11, RAF1, RIT1, SHOC2, and SOS1
81445	Targeted genomic sequence analysis panel, solid organ neoplasm, DNA analysis, and RNA analysis when performed, 5-50 genes (eg, ALK, BRAF, CDKN2A, EGFR, ERBB2, KIT, KRAS, NRAS, MET, PDGFRA, PDGFRB, PGR, PIK3CA, PTEN, RET), interrogation for sequence variants and copy number variants or rearrangements, if performed
81450	Targeted genomic sequence analysis panel, hematolymphoid neoplasm or disorder, DNA analysis, and RNA analysis when performed, 5-50 genes (eg, BRAF, CEBPA, DNMT3A, EZH2, FLT3, IDH1, IDH2, JAK2, KRAS, KIT, MLL, NRAS, NPM1, NOTCH1), interrogation for sequence variants, and copy number variants or rearrangements, or isoform expression or mRNA expression levels, if performed
81455	Targeted genomic sequence analysis panel, solid organ or hematolymphoid neoplasm, DNA analysis, and RNA analysis when performed, 51 or greater genes (eg, ALK, BRAF, CDKN2A, CEBPA, DNMT3A, EGFR, ERBB2, EZH2, FLT3, IDH1, IDH2, JAK2, KIT, KRAS, MLL, NPM1, NRAS, MET, NOTCH1, PDGFRA, PDGFRB, PGR, PIK3CA, PTEN, RET), interrogation for sequence variants and copy number variants or rearrangements, if performed
81460	Whole mitochondrial genome (eg, Leigh syndrome, mitochondrial encephalomyopathy, lactic acidosis, and stroke-like episodes [MELAS], myoclonic epilepsy with ragged-red fibers [MERFF], neuropathy, ataxia, and retinitis pigmentosa [NARP], Leber hereditary optic neuropathy [LHON]), genomic sequence, must include sequence analysis of entire mitochondrial genome with heteroplasmy detection
81465	Whole mitochondrial genome large deletion analysis panel (eg, Kearns-Sayre syndrome, chronic progressive external ophthalmoplegia), including heteroplasmy detection, if performed
81470	X-linked intellectual disability (XLID) (eg, syndromic and non-syndromic XLID); genomic sequence analysis panel, must include sequencing of at least 60 genes, including ARX, ATRX, CDKL5, FGD1, FMR1, HUWE1, IL1RAPL, KDM5C, L1CAM, MECP2, MED12, MID1, OCRL, RPS6KA3, and SLC16A2
81471	X-linked intellectual disability (XLID) (eg, syndromic and non-syndromic XLID); duplication/deletion gene analysis, must include analysis of at least 60 genes, including ARX, ATRX, CDKL5, FGD1, FMR1, HUWE1, IL1RAPL, KDM5C, L1CAM, MECP2, MED12, MID1, OCRL, RPS6KA3, and SLC16A2
81479	Unlisted molecular pathology procedure
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
81504	Oncology (tissue of origin), microarray gene expression profiling of > 2000 genes, utilizing formalin-fixed paraffin-embedded tissue, algorithm reported as tissue similarity scores
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
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

A-8 Molecular Genetic Lab	
Code	**Code Description**
81525	Oncology (colon), mRNA, gene expression profiling by real-time RT-PCR of 12 genes (7 content and 5 housekeeping), utilizing formalin-fixed paraffin-embedded tissue, algorithm reported as a recurrence score
81528	Oncology (colorectal) screening, quantitative real-time target and signal amplification of 10 DNA markers (KRAS mutations, promoter methylation of NDRG4 and BMP3) and fecal hemoglobin, utilizing stool, algorithm reported as a positive or negative result
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
81536	Oncology (gynecologic), live tumor cell culture and chemotherapeutic response by DAPI stain and morphology, predictive algorithm reported as a drug response score; each additional single drug or drug combination (List separately in addition to code for primary procedure)
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 (Total PSA, Free PSA, Intact PSA, and human kallikrein-2 [hK2]), utilizing plasma or serum, prognostic algorithm reported as a probability score
81540	Oncology (tumor of unknown origin), mRNA, gene expression profiling by real-time RT-PCR of 92 genes (87 content and 5 housekeeping) to classify tumor into main cancer type and subtype, utilizing formalin-fixed paraffin-embedded tissue, algorithm reported as a probability of a predicted main cancer type and subtype
81545	Oncology (thyroid), gene expression analysis of 142 genes, utilizing fine needle aspirate, algorithm reported as a categorical result (eg, benign or suspicious)
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
81599	Unlisted multianalyte assay with algorithmic analysis
84999	Unlisted chemistry procedure
0004M	Scoliosis, Dna Analysis Of 53 Single Nucleotide Polymorphisms
0006M	Oncology (Hepatic), Mrna Expression Levels Of 161 Genes
0007M	Oncology (Gastrointestinal Neuroendocrine Tumors), Real-Time Pcr Expression Analysis
0008M	Oncology (Breast), Mrna Analysis Of 58 Genes Using Hybrid Capture
0009M	Fetal Aneuploidy (Trisomy 21, And 18) Dna Sequence Analysis
0010M	Oncology (High-Grade Prostate Cancer), Biochemical Assay Of Four Proteins
G9143	Warfarin responsiveness testing by genetic technique using any method, any number of specimen(s)
S3800	Genetic testing for amyotrophic lateral sclerosis (als)
S3840	DNA analysis for germline mutations of the ret proto-oncogene for susceptibility to multiple endocrine neoplasia type 2
S3841	Genetic testing for retinoblastoma
S3842	Genetic testing for von hippel-lindau disease
S3845	Genetic testing for alpha-thalassemia
S3846	Genetic testing for hemoglobin e beta-thalassemia
S3852	DNA analysis for apoe epsilon 4 allele for susceptibility to alzheimer's disease
S3854	Gene expression profiling panel for use in the management of breast cancer treatment

A-8 Molecular Genetic Lab	
Code	**Code Description**
S3861	Genetic testing, sodium channel, voltage-gated, type v, alpha subunit (scn5a) and variants for suspected brugada syndrome
S3865	Comprehensive gene sequence analysis for hypertrophic cardiomyopathy
S3866	Genetic analysis for a specific gene mutation for hypertrophic cardiomyopathy (hcm) in an individual with a known hcm mutation in the family
S3870	Comparative genomic hybridization (cgh) microarray testing for developmental delay, autism spectrum disorder and/or intellectual disability

A-9 Specialty Pharmacy			
Therapeutic Category	**HCPC**	**Brand Drug**	**Code Description**
Alpha-1 antitrypsin deficiency	J0256	Aralast, Zemaira	Injection, alpha 1 proteinase inhibitor (human), not otherwise specified, 10 mg
	J0257	Glassia	Injection, alpha 1 proteinase inhibitor (human), (glassia), 10 mg
	S9346	Prolastin	Home infusion therapy, alpha-1-proteinase inhibitor (e.g., prolastin); administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem
Anemia	J0882	Aranesp	Injection, darbepoetin alfa, 1 microgram (for esrd on dialysis)
	J0885	Procrit, Epogen	Injection, epoetin alfa, (for non-esrd use), 1000 units
	J0887	Mircera for ESRD	Injection, epoetin beta, 1 microgram, (for esrd on dialysis)
	J0888	Mircera for non-ESRD	Injection, epoetin beta, 1 microgram, (for non esrd use)
	J0890	Omontys	Injection, peginesatide, 0.1 mg (for esrd on dialysis)
	Q4081	Procrit, Epogen	Injection, epoetin alfa, 100 units (for esrd on dialysis)
	Q9973	Mircera for non-ESRD	Injection, epoetin beta, 1 microgram, (non-esrd use)
	J2357	Xolair	Injection, omalizumab, 5 mg
CAPS	J0638	Ilaris	Injection, canakinumab, 1 mg
	J2793	Arcalyst	Injection, rilonacept, 1 mg
Cystic fibrosis	J7639	Pulmozyme	Dornase alfa, inhalation solution, fda-approved final product, non-compounded, administered through dme, unit dose form, per milligram
	J7682	Bethkis, Kitabis, Tobi	Tobramycin, inhalation solution, fda-approved final product, non-compounded, unit dose form, administered through dme, per 300 milligrams
Gout	J2507	KrysteXXa	Injection, pegloticase, 1 mg
Growth disorder	J1930	Somatuline	Injection, lanreotide, 1 mg
	J2170	IncreleX	Injection, mecasermin, 1 mg
	J2353	Sandostatin	Injection, octreotide, depot form for intramuscular injection, 1 mg
	J2354	Sandostatin	Injection, octreotide, non-depot form for subcutaneous or intravenous injection, 25 mcg
Hematopoietics	J1442	Neupogen	Injection, filgrastim (g-csf), eXcludes biosimilars, 1 microgram
	J1447	GraniX	Injection, tbo-filgrastim, 1 microgram
	J2355	Neumega	Injection, oprelvekin, 5 mg
	J2820	Leukine	Injection, sargramostim (gm-csf), 50 mcg
	Q5101	ZarXio	Injection, filgrastim (g-csf), biosimilar, 1 microgram
Heriditary angioedema	J0596	Ruconest	Injection, c1 esterase inhibitor (recombinant), ruconest, 10 units
	J0597	Berinert	Injection, c-1 esterase inhibitor (human), berinert, 10 units
	J0598	Cinryze	Injection, c-1 esterase inhibitor (human), cinryze, 10 units
	J1290	Kalbitor	Injection, ecallantide, 1 mg

A-9 Specialty Pharmacy			
Therapeutic Category	**HCPC**	**Brand Drug**	**Code Description**
	j1744	Firazyr	Injection, icatibant, 1 mg
Hormonal therapy	J9226	Supprelin LA	Histrelin implant (supprelin la), 50 mg
Immune deficiency	90281	Gamastan	Immune globulin (Ig), human, for intramuscular use
	90283	Immune globulin	Immune globulin (IgIV), human, for intravenous use
	90284	Gammagard	Immune globulin (SCIg), human, for use in subcutaneous infusions, 100 mg, each
	J1459	Privigen	Injection, immune globulin (privigen), intravenous, non-lyophilized (e.g., liquid), 500 mg
	J1556	Bivigam	Injection, immune globulin (bivigam), 500 mg
	J1557	GammapleX	Injection, immune globulin, (gammapleX), intravenous, non-lyophilized (e.g., liquid), 500 mg
	J1559	Hizentra	Injection, immune globulin (hizentra), 100 mg
	J1560	Gamastan	Injection, gamma globulin, intramuscular, over 10 cc
	J1561	GamuneX, Gammaked	Injection, immune globulin, (gamuneX-c/gammaked), non-lyophilized (e.g., liquid), 500 mg
	J1566	Carimune NF Panglobulin NF Gammagard SD	Injection, immune globulin, intravenous, lyophilized (e.g., powder), not otherwise specified, 500 mg
	J1568	Octagam	Injection, immune globulin, (octagam), intravenous, non-lyophilized (e.g., liquid), 500 mg
	J1569	Gammagard non-lypholized	Injection, immune globulin, (gammagard liquid), non-lyophilized, (e.g., liquid), 500 mg
	J1572	Flebogamma	Injection, immune globulin, (flebogamma/flebogamma dif), intravenous, non-lyophilized (e.g., liquid), 500 mg
	J1575	Hyqvia	Injection, immune globulin/hyaluronidase, (hyqvia), 100 mg immuneglobulin
Immune modulators	C9293	VoraXaze	Injection, glucarpidase, 10 units
	J1745	Remicade	Injection infliximab, 10 mg
	J3380	Entyvio	Injection, vedolizumab, 1 mg
	J9310	RituXan	Injection, rituximab, 100 mg
	J0129	Orencia	Injection, abatacept, 10 mg (code may be used for medicare when drug administered under the direct supervision of a physician, not for use when drug is self administered)
	J0800	Acthar	Injection, corticotropin, up to 40 units
	J1602	Simponi Aria	Injection, golimumab, 1 mg, for intravenous use
	J3262	Actemra	Injection, tocilizumab, 1 mg
Infectious Disease	J9215	Alferon N	Injection, interferon, alfa-n3, (human leukocyte derived), 250,000 iu
	J9216	Actimmune	Injection, interferon, gamma 1-b, 3 million units
ITP	J2796	Nplate	Injection, romiplostim, 10 micrograms

A-9 Specialty Pharmacy			
Therapeutic Category	**HCPC**	**Brand Drug**	**Code Description**
Lupus	J0490	Benlysta	Injection, belimumab, 10 mg
Lysosomal storage disorders	J0180	Fabrazyme	Injection, agalsidase beta, 1 mg
	J0220	Myozyme	Injection, alglucosidase alfa, 10 mg, not otherwise specified
	J0221	Lumizyme	Injection, alglucosidase alfa, (lumizyme), 10 mg
	J1322	Vimizim	Injection, elosulfase alfa, 1 mg
	J1458	Naglazyme	Injection, galsulfase, 1 mg
	J1743	Elaprase	Injection, idursulfase, 1 mg
	J1786	Cerezyme	Injection, imiglucerase, 10 units
	J1931	Aldurazyme	Injection, laronidase, 0.1 mg
	J2504	Adagen	Injection, pegademase bovine, 25 iu
	J3060	Elelyso	Injection, taliglucerace alfa, 10 units
	J3385	Vpriv	Injection, velaglucerase alfa, 100 units
	S9357	Cerezyme	Home infusion therapy, enzyme replacement intravenous therapy; (e.g., imiglucerase); administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem
Multiple sclerosis	J0202	Lemtrada	Injection, alemtuzumab, 1 mg
	J2323	Tysabri	Injection, natalizumab, 1 mg
	J9293	Novantrone	Injection, mitoXantrone hydrochloride, per 5 mg
Ophthalmic disorder	C9257	Avastin	Injection, bevacizumab, 0.25 mg
	J0178	Eylea	Injection, aflibercept, 1 mg
	J2503	Macugen	Injection, pegaptanib sodium, 0.3 mg
	J2778	Lucentis	Injection, ranibizumab, 0.1 mg
	J3396	Visudyne	Injection, verteporfin, 0.1 mg
	J7311	Retisert	Fluocinolone acetonide, intravitreal implant
	J7312	OzurdeX	Injection, deXamethasone, intravitreal implant, 0.1 mg
	J7313	Iluvien	Injection, fluocinolone acetonide, intravitreal implant, 0.01 mg
	J7316	Jetrea	Injection, ocriplasmin, 0.125 mg
Osteoarthritis	J7321	Hyalgan, Supartz	Hyaluronan or derivative, hyalgan or supartz, for intra-articular injection, per dose
	J7323	EufleXXa	Hyaluronan or derivative, eufleXXa, for intra-articular injection, per dose
	J7324	Dacarbazine	Hyaluronan or derivative, orthovisc, for intra-articular injection, per dose
	J7325	Dacarbazine	Hyaluronan or derivative, synvisc or synvisc-one, for intra-articular injection, 1 mg
	J7326	Gel-one hyaluronan	Hyaluronan or derivative, gel-one, for intra-articular injection, per dose

A-9 Specialty Pharmacy			
Therapeutic Category	**HCPC**	**Brand Drug**	**Code Description**
	J7327	Monovisc	Hyaluronan or derivative, monovisc, for intra-articular injection, per dose
	Q9980	Genvisc	Hyaluronan or derivative, genvisc 850, for intra-articular injection, 1 mg
	J0897	Xgeva, Prolia	Injection, denosumab, 1 mg
	J3489	Zoledronic Acid	Injection, zoledronic acid, 1 mg
PNH	J1300	Soliris	Injection, eculizumab, 10 mg
Pulmonary arterial hypertension	J1325	Epoprostenol	Injection, epoprostenol, 0.5 mg
	J3285	Remodulin	Injection, treprostinil, 1 mg
RSV	90378	RSV antibody	Respiratory syncytial virus, monoclonal antibody, recombinant, for intramuscular use, 50 mg, each
	S9562	Synagis	Home injectable therapy, palivizumab, including administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem
Spacticity disorder	J0585	BotoX	Injection, onabotulinumtoXina, 1 unit
	J0586	Dysport	Injection, abobotulinumtoXina, 5 units
	J0587	Myobloc	Injection, rimabotulinumtoXinb, 100 units
	J0588	Xeomin	Injection, incobotulinumtoXin a, 1 unit
Other	J0364	Apokyn	Injection, apomorphine hydrochloride, 1 mg
	J0775	XiafleX	Injection, collagenase, clostridium histolyticum, 0.01 mg
	J2315	Vivitrol	Injection, naltreXone, depot form, 1 mg
	J2502	Signifor	Injection, pasireotide long acting, 1 mg