

# Supplemental Information

Q1. The list of codes evaluated and categorized into the three categories of Information Loss, Overlapping Categories, and Inconsistent are provided.

The ICD-9-CM codes are provided without the decimal point, (normally after the third digit) as is routine for files interfacing with computer sys-

tems. The text to the right of each code is the description provided by the Center for Medicaid and Medicare Services.

Information Loss	
436	Acute, but ill-defined cerebrovascular disease
5111	Pleurisy with effusion, with mention of a bacterial cause other than tuberculosis
5173	Acute chest syndrome
5362	Persistent vomiting
5778	Other specified diseases of pancreas
6242	Hypertrophy of clitoris
7135	Arthropathy associated with neurological disorders
7226	Degeneration of intervertebral disc, site unspecified
7685	Severe birth asphyxia
7686	Mild or moderate birth asphyxia
8290	Fracture NOS-closed
8820	Open wound of foot except toe(s) alone, without mention of complication
9110	Abrasion or friction burn of trunk, without mention of infection
9301	Foreign body in conjunctival sac
9595	Other and unspecified injury to finger
34580	Other forms of epilepsy, without mention of intractable epilepsy
36202	Proliferative diabetic retinopathy
37621	Thyrototoxic exophthalmos
37622	Exophthalmic ophthalmoplegia
37992	Swelling or mass of eye
41400	Coronary atherosclerosis of unspecified type of vessel, native or graft
47820	Disease of pharynx NOS
63592	Threatened abortion, delivered
64001	Hemorrhage from placenta previa, with delivery
64813	Thyroid dysfunction, antepartum
64851	Congenital cardiovascular disorders of mother, with delivery
65281	Other specified malposition or malpresentation, delivered
65583	Other known or suspected fetal abnormality, not elsewhere classified, affecting management of mother, antepartum condition or complication
68101	Felon
71592	Osteoarthritis, unspecified whether generalized or localized, involving upper arm
71598	Osteoarthritis, unspecified whether generalized or localized, involving other specified sites
71696	Arthropathy unspecified, involving lower leg
71697	Arthropathy unspecified, involving ankle and foot
73025	Unspecified osteomyelitis involving pelvic region and thigh
73026	Unspecified osteomyelitis involving lower leg
73027	Unspecified osteomyelitis involving ankle and foot
74510	Complete transposition of great vessels
74782	Congenital anomaly of spinal vessel
75613	Absence of vertebra, congenital
76493	Fetal growth retardation, unspecified, 750-999 grams
76499	Fetal growth retardation, unspecified, 2,500+ grams
76519	Other preterm infants, 2,500+ grams
87362	Open wound of gum (alveolar process), uncomplicated
87369	Open wound of internal structure of mouth, other and multiple sites, uncomplicated
99678	Other complications due to other internal orthopedic device, implant, and graft
99739	Other respiratory complications
E8498	Accidents occurring in other specified places
E857	Accidental poisoning by other anti-infectives
V035	Need for prophylactic vaccination and inoculation against diphtheria alone
V0381	Need for prophylactic vaccination against Hemophilus influenzae, type B [Hib]
V0382	Need for prophylactic vaccination against Streptococcus pneumoniae [pneumococcus]
V040	Need for prophylactic vaccination and inoculation against poliomyelitis
V0481	Need for prophylactic vaccination and inoculation against influenza
V0482	Need for prophylactic vaccination and inoculation against respiratory syncytial virus (RSV)
V053	Need for prophylactic vaccination and inoculation against viral hepatitis
V054	Need for prophylactic vaccination and inoculation against varicella
V058	Need for prophylactic vaccination and inoculation against other specified disease
V061	Need for prophylactic vaccination with combined diphtheria-tetanus-pertussis [DTP] [DTaP] vaccine
V063	Need for prophylactic vaccination with diphtheria-tetanus-pertussis with poliomyelitis (DTP + polio) vaccine
V064	Need for prophylactic vaccination with measles-mumps-rubella [MMR] vaccine
V065	Need for prophylactic vaccination and inoculation with Tetanus-diphtheria [Td] [DT
V066	Need for prophylactic vaccination and inoculation against Streptococcus pneumoniae [pneumococcus] and influenza
V069	Need for prophylactic vaccination with unspecified combined vaccine
V113	Personal history of alcoholism
V1329	Personal history of other genital system and obstetric disorders
V151	Personal history of surgery to heart and great vessels, presenting hazards to health
V474	Other urinary problems
V491	Mechanical problems with limbs
V6123	Cnsl prnt-biol child prob
V6543	Counseling on injury prevention
V702	General psychiatric examination, other and unspecified
V7102	Observation for childhood or adolescent antisocial behavior
V711	Observation for suspected malignant neoplasm
V7398	Screening examination for unspecified chlamydial disease
V740	Screening examination for cholera
V746	Screening examination for yaws
V770	Screening for thyroid disorders
V780	Screening for iron deficiency anemia
V781	Screening for other and unspecified deficiency anemia
V810	Screening for ischemic heart disease
2801	Iron deficiency anemia secondary to inadequate dietary iron intake
9190	Abrasion or friction burn of other, multiple, and unspecified sites, without mention of infection
28261	Hb-S5 disease without crisis
30480	Combinations of drug dependence excluding opioid type drug, unspecified use
38583	Retained foreign body of middle ear
64941	Epilepsy complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition
71691	Arthropathy, unspecified, involving shoulder region
V778	Screening for obesity

**Overlapping Categories**

932	Foreign body in nose
2511	Other specified hypoglycemia
2727	Lipidoses
2980	Depressive type psychosis
3572	Polyneuropathy in diabetes
4779	Allergic rhinitis NOS
7246	Disorders of sacrum
7707	Chronic respiratory disease arising in the perinatal period
8064	Closed fracture of lumbar spine with spinal cord injury
8832	Open wound of fingers, with tendon involvement
9151	Abrasion or friction burn of fingers, infected
9179	Other and unspecified superficial injury of foot and toes, infected
9331	Foreign body in larynx
9593	Other and unspecified injury to elbow, forearm, and wrist
9663	Poisoning by other and unspecified anticonvulsants
9848	Toxic effect of other lead compounds
9895	Toxic effect of venom
20288	Other malignant lymphomas involving lymph nodes of multiple sites
23879	Other lymphatic and hematopoietic tissues
25013	type I diabetes mellitus [juvenile type], uncontrolled, with ketoacidosis
25050	Diabetes mellitus type II [non-insulin dependent type] [NIDDM type] [adult-onset type] or unspecified type, not stated as uncontrolled, with ophthalmic manifestations
25052	Diabetes mellitus type I [non-insulin dependent type] [NIDDM type] [adult-onset type] or unspecified type, uncontrolled, with ophthalmic manifestations
25053	Diabetes mellitus type I [juvenile type], uncontrolled, with ophthalmic manifestations
25541	Gluocorticoid deficiency
27789	Other specified disorders of metabolism
29289	Other specified drug-induced mental disorders
31401	Attention deficit disorder of childhood with hyperactivity
41511	Iatrogenic pulmonary embolism and infarction
43400	Cerebral thrombosis, without mention of cerebral infarction
59389	Lurethritis NOS
60889	Legally induced abortion, complete, without mention of complication
64111	Premature separation of placenta, with delivery
64121	Unspecified antepartum hemorrhage, antepartum
64201	Benign essential hypertension antepartum
64231	Transient hypertension of pregnancy, antepartum
64233	Mild or unspecified pre-eclampsia, with delivery
64241	Severe pre-eclampsia, with delivery
64251	Severe pre-eclampsia, postpartum
64611	Edema or excessive weight gain in pregnancy, with delivery, with or without mention of antepartum complication
64613	Edema or excessive weight gain, antepartum
64683	Other specified complication, antepartum
64701	Syphilis of mother, complicating pregnancy, with delivery
64721	Other venereal diseases of mother, with delivery, with or without mention of antepartum condition
64801	Diabetes mellitus of mother, with delivery
64861	Other cardiovascular diseases of mother, with delivery
64881	Abnormal glucose tolerance of mother, with delivery
64891	Other current conditions classifiable elsewhere of mother, with delivery
64893	Other current conditions classifiable elsewhere of mother, antepartum
64894	Other current conditions classifiable elsewhere of mother, postpartum
64931	Coagulation defects complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition
64943	Epilepsy complicating pregnancy, childbirth, or the puerperium, antepartum condition or complication
64961	Uterine size date discrepancy, delivered, with or without mention of antepartum condition
65411	Tumors of body of uterus, with delivery
65443	Other abnormalities in shape or position of gravid uterus and of neighboring structures, antepartum
65492	Other and unspecified abnormality of organs and soft tissues of pelvis, delivered, with mention of postpartum complication
65651	Poor fetal growth, affecting management of mother, delivered
65681	Other specified fetal and placental problems, affecting management of mother, delivered
65811	Premature rupture of membranes, delivered
65821	Delayed delivery after spontaneous or unspecified rupture of membranes, delivered
65961	Other advanced maternal age, delivered, with or without mention of antepartum condition
66702	Retained placenta without hemorrhage, with delivery, with mention of postpartum complication
67181	Other venous complications, with delivery, with or without mention of antepartum condition
67803	Fetal hematologic conditions, antepartum condition or complication
71108	Pyogenic arthritis involving other specified sites
73349	Aseptic necrosis of other bone sites
78079	Other malaise and fatigue
78499	Other symptoms involving head and neck
78609	Other dyspnea and respiratory abnormality
78659	Other chest pain
78703	Vomiting alone
78791	Diarrhea
89709	Other nervous system complications
99811	Hemorrhage complicating a procedure
V2389	Other high-risk pregnancy
V679	Unspecified follow-up examination
V705	Health examination of defined subpopulations
V7231	Routine gynecological examination
V748	Screening examination for other specified bacterial and spirochetal diseases
2168	Benign neoplasm of other specified sites of skin
3159	Unspecified delay in development
3418	Other demyelinating diseases of central nervous system
5289	Other and unspecified diseases of the oral soft tissues
5719	Unspecified chronic liver disease without mention of alcohol
6248	Other specified noninflammatory disorders of vulva and perineum
7098	Other specified disorders of skin
9177	Superficial foreign body (splinter) of foot and toe(s), without major open wound, infected
9594	Other and unspecified injury to hand, except finger
9840	Toxic effect of inorganic lead compounds
20380	Other immunoproliferative neoplasms without mention of having achieved remission
28989	Other specified diseases of blood and blood-forming organs
31239	Other disorders of impulse control
41519	Other pulmonary embolism and infarction
51909	Dental caries extending into pulp
52800	Stomatitis and mucositis, unspecified
64223	Transient hypertension of pregnancy, with delivery
64254	Pre-eclampsia or eclampsia superimposed on pre-existing hypertension, with delivery
64291	Edema or excessive weight gain in pregnancy, with delivery, with mention of postpartum complication
64612	Other specified complications of pregnancy, with delivery, with mention of postpartum complication
64682	Drug dependence of mother, with delivery
64831	Other complications of labor and delivery, delivered, with or without mention of antepartum condition
66981	Other venous complications, with delivery, with mention of postpartum complication
67182	Other joint derangement, not elsewhere classified, involving lower leg
71886	Other specified disorders of bursae and tendons in shoulder region
72619	Congenital dislocation of knee (with genu recurvatum)
75441	Other specified congenital anomalies of skin
75739	Extreme immaturity, unspecified [weight]
76500	Extreme immaturity, 2,500+ grams
76509	Other nonspecific positive culture findings
79539	History of contact with and (suspected) exposure to potentially hazardous body fluids
V1585	Observation for suspected infectious condition
V2590	Other mental problems
V402	Problems with sight
V410	Family circumstances NEC
V618	Other specified general medical examinations
V708	Other specified general medical examinations

Inconsistent	
2776	Other deficiencies of circulating enzymes
3079	Other and unspecified special symptoms or syndromes, not elsewhere classified
6819	Cellulitis and abscess of unspecified digit
6823	Cellulitis and abscess of upper arm and forearm
6943	Impetigo herpetiformis
7952	Nonspecific abnormal findings on chromosomal analysis
9460	Burns of multiple specified sites, unspecified degree
9462	Blisters with epidermal loss due to burn [second degree] of multiple specified sites
20088	Other named variants of lymphosarcoma and reticulosarcoma involving lymph nodes of multiple sites
29980	Other specified early childhood psychoses, current or active state
30922	Emancipation disorder
31400	Attention deficit disorder of childhood without mention of hyperactivity
53510	Unspecified ventral hernia without mention of obstruction or gangrene
65461	Other congenital or acquired abnormality of cervix, with delivery
65841	Infection of amniotic cavity, delivered
68100	Cellulitis, finger NOS
68110	Cellulitis, toe NOS
74100	With hydrocephalus, spina bifida, unspecified region
78604	Cheyne-Stokes respiration
99590	SIRS, NOS
E856	Accidental poisoning by antibiotics
V1529	Personal history of surgery to other organs, presenting hazards to health
V218	Other specified constitutional states in development
V298	Observation for other specified suspected condition
V727	Diagnostic skin and sensitization tests
V742	Screening examination for leprosy [Hansen's disease]
3061	Respiratory malfunction arising from mental factors
4150	Acute cor pulmonale
5722	Hepatic encephalopathy
6208	Other noninflammatory disorders of ovary, fallopian tube, and broad ligament
6826	Cellulitis and abscess of leg, except foot
6827	Cellulitis and abscess of foot, except toes
9351	Foreign body in esophagus
64892	Other current conditions classifiable elsewhere of mother, with delivery, with mention of postpartum complication
66704	Retained placenta without hemorrhage, postpartum condition or complication
68102	Onychia and paronychia of finger
68111	Onychia and paronychia of toe
75552	Congenital elevation of scapula
78060	Fever NOS
99701	Central nervous system complication
E9289	Accident NOS
V072	Need for prophylactic immunotherapy