

MILLIMAN RESEARCH REPORT

A claims-based analysis of sickle cell disease: Supplement

Considerations for commercial and managed Medicaid payers

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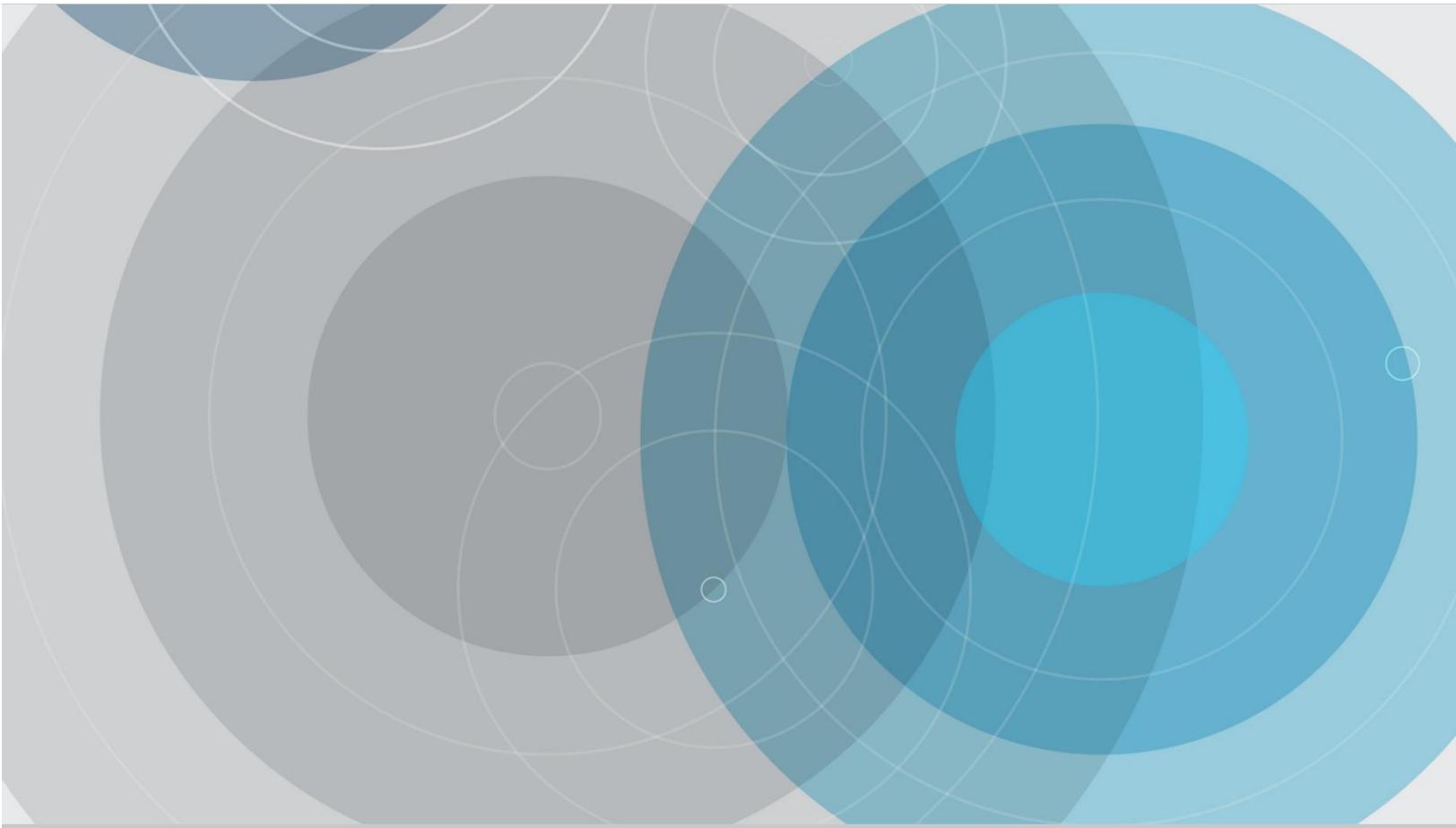




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Appendix A: ICD-10 Inpatient Acute and Chronic Condition Code Lists

A1: ACUTE CHEST SYNDROME

ICD-10-CM Code	Description
D5701	Hb-SS disease with acute chest syndrome
D57211	Sickle-cell/Hb-C disease with acute chest syndrome
D57411	Sickle-cell thalassemia with acute chest syndrome
D57811	Other sickle-cell disorders with acute chest syndrome

A2: ACUTE CHOLECYSTITIS/CHOLANGITIS

ICD-10-CM Code	Description
K8000	Calculus of gallbladder with acute cholecystitis without obstruction
K8001	Calculus of gallbladder with acute cholecystitis with obstruction
K8032	Calculus of bile duct with acute cholangitis without obstruction
K8033	Calculus of bile duct with acute cholangitis with obstruction
K8042	Calculus of bile duct with acute cholecystitis without obstruction
K8043	Calculus of bile duct with acute cholecystitis with obstruction
K8062	Calculus of gallbladder and bile duct with acute cholecystitis without obstruction
K8063	Calculus of gallbladder and bile duct with acute cholecystitis with obstruction
K810	Acute cholecystitis
K812	Acute cholecystitis with chronic cholecystitis

A3: ACUTE KIDNEY FAILURE

ICD-10-CM Code	Description
N170	Acute kidney failure with tubular necrosis
N171	Acute kidney failure with acute cortical necrosis
N172	Acute kidney failure with medullary necrosis
N178	Other acute kidney failure
N179	Acute kidney failure, unspecified
O904	Postpartum acute kidney failure

A4: ACUTE MYOCARDIAL INFARCTION

ICD-10-CM Code	Description
I2101	ST elevation (STEMI) myocardial infarction involving left main coronary artery
I2102	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery
I2109	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall
I2111	ST elevation (STEMI) myocardial infarction involving right coronary artery
I2119	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall
I2121	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery
I2129	ST elevation (STEMI) myocardial infarction involving other sites
I213	ST elevation (STEMI) myocardial infarction of unspecified site
I214	Non-ST elevation (NSTEMI) myocardial infarction
I219	Acute myocardial infarction, unspecified
I21A1	Myocardial infarction type 2
I21A9	Other myocardial infarction type
I220	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall
I221	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall
I222	Subsequent non-ST elevation (NSTEMI) myocardial infarction
I228	Subsequent ST elevation (STEMI) myocardial infarction of other sites
I229	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site
I240	Acute coronary thrombosis not resulting in myocardial infarction

A5: PNEUMONIA

ICD-10-CM Code	Description
A0103	Typhoid pneumonia
A0222	Salmonella pneumonia
A3701	Whooping cough due to Bordetella pertussis with pneumonia
A3711	Whooping cough due to Bordetella parapertussis with pneumonia
A3781	Whooping cough due to other Bordetella species with pneumonia
A3791	Whooping cough, unspecified species with pneumonia
A403	Sepsis due to Streptococcus pneumoniae
A5004	Early congenital syphilitic pneumonia
A5484	Gonococcal pneumonia
B012	Varicella pneumonia
B052	Measles complicated by pneumonia
B0681	Rubella pneumonia
B7781	Ascariasis pneumonia
B953	Streptococcus pneumoniae as the cause of diseases classified elsewhere
B960	Mycoplasma pneumoniae [M. pneumoniae] as the cause of diseases classified elsewhere
B961	Klebsiella pneumoniae [K. pneumoniae] as the cause of diseases classified elsewhere

J09X1	Influenza due to identified novel influenza A virus with pneumonia
J1000	Influenza due to other identified influenza virus with unspecified type of pneumonia
J1001	Influenza due to other identified influenza virus with the same other identified influenza virus pneumonia
J1008	Influenza due to other identified influenza virus with other specified pneumonia
J1100	Influenza due to unidentified influenza virus with unspecified type of pneumonia
J1108	Influenza due to unidentified influenza virus with specified pneumonia
J120	Adenoviral pneumonia
J121	Respiratory syncytial virus pneumonia
J122	Parainfluenza virus pneumonia
J123	Human metapneumovirus pneumonia
J1281	Pneumonia due to SARS-associated coronavirus
J1289	Other viral pneumonia
J129	Viral pneumonia, unspecified
J13	Pneumonia due to Streptococcus pneumoniae
J14	Pneumonia due to Hemophilus influenzae
J150	Pneumonia due to Klebsiella pneumoniae
J151	Pneumonia due to Pseudomonas
J1520	Pneumonia due to staphylococcus, unspecified
J15211	Pneumonia due to Methicillin susceptible Staphylococcus aureus
J15212	Pneumonia due to Methicillin resistant Staphylococcus aureus
J1529	Pneumonia due to other staphylococcus
J153	Pneumonia due to streptococcus, group B
J154	Pneumonia due to other streptococci
J155	Pneumonia due to Escherichia coli
J156	Pneumonia due to other Gram-negative bacteria
J157	Pneumonia due to Mycoplasma pneumoniae
J158	Pneumonia due to other specified bacteria
J159	Unspecified bacterial pneumonia
J160	Chlamydial pneumonia
J168	Pneumonia due to other specified infectious organisms
J17	Pneumonia in diseases classified elsewhere
J180	Bronchopneumonia, unspecified organism
J181	Lobar pneumonia, unspecified organism
J182	Hypostatic pneumonia, unspecified organism
J188	Other pneumonia, unspecified organism
J189	Pneumonia, unspecified organism
J200	Acute bronchitis due to Mycoplasma pneumoniae
J84111	Idiopathic interstitial pneumonia, not otherwise specified
J84116	Cryptogenic organizing pneumonia
J84117	Desquamative interstitial pneumonia

J842	Lymphoid interstitial pneumonia
J851	Abscess of lung with pneumonia
P230	Congenital pneumonia due to viral agent
P231	Congenital pneumonia due to Chlamydia
P232	Congenital pneumonia due to staphylococcus
P233	Congenital pneumonia due to streptococcus, group B
P234	Congenital pneumonia due to Escherichia coli
P235	Congenital pneumonia due to Pseudomonas
P236	Congenital pneumonia due to other bacterial agents
P238	Congenital pneumonia due to other organisms
P239	Congenital pneumonia, unspecified

A6: SEPSIS

ICD-10-CM Code	Description
A021	Salmonella sepsis
A227	Anthrax sepsis
A267	Erysipelothrix sepsis
A327	Listerial sepsis
A400	Sepsis due to streptococcus, group A
A401	Sepsis due to streptococcus, group B
A403	Sepsis due to Streptococcus pneumoniae
A408	Other streptococcal sepsis
A409	Streptococcal sepsis, unspecified
A4101	Sepsis due to Methicillin susceptible Staphylococcus aureus
A4102	Sepsis due to Methicillin resistant Staphylococcus aureus
A411	Sepsis due to other specified staphylococcus
A412	Sepsis due to unspecified staphylococcus
A413	Sepsis due to Hemophilus influenzae
A414	Sepsis due to anaerobes
A4150	Gram-negative sepsis, unspecified
A4151	Sepsis due to Escherichia coli [E. coli]
A4152	Sepsis due to Pseudomonas
A4153	Sepsis due to Serratia
A4159	Other Gram-negative sepsis
A4181	Sepsis due to Enterococcus
A4189	Other specified sepsis
A419	Sepsis, unspecified organism
A427	Actinomycotic sepsis
A5486	Gonococcal sepsis

B377	Candidal sepsis
O0337	Sepsis following incomplete spontaneous abortion
O0387	Sepsis following complete or unspecified spontaneous abortion
O0487	Sepsis following (induced) termination of pregnancy
O0737	Sepsis following failed attempted termination of pregnancy
O0882	Sepsis following ectopic and molar pregnancy
O85	Puerperal sepsis
O8604	Sepsis following an obstetrical procedure
P360	Sepsis of newborn due to streptococcus, group B
P3610	Sepsis of newborn due to unspecified streptococci
P3619	Sepsis of newborn due to other streptococci
P362	Sepsis of newborn due to Staphylococcus aureus
P3630	Sepsis of newborn due to unspecified staphylococci
P3639	Sepsis of newborn due to other staphylococci
P364	Sepsis of newborn due to Escherichia coli
P365	Sepsis of newborn due to anaerobes
P368	Other bacterial sepsis of newborn
P369	Bacterial sepsis of newborn, unspecified
R6520	Severe sepsis without septic shock
R6521	Severe sepsis with septic shock
T8144XA	Sepsis following a procedure, initial encounter
T8144XD	Sepsis following a procedure, subsequent encounter
T8144XS	Sepsis following a procedure, sequela

A7: SPLENIC SEQUESTRATION

ICD-10-CM Code	Description
D5702	Hb-SS disease with splenic sequestration
D57212	Sickle-cell/Hb-C disease with splenic sequestration
D57412	Sickle-cell thalassemia with splenic sequestration
D57812	Other sickle-cell disorders with splenic sequestration

A8: STROKE

ICD-10-CM Code	Description
G43601	Persistent migraine aura with cerebral infarction, not intractable, with status migrainosus
G43609	Persistent migraine aura with cerebral infarction, not intractable, without status migrainosus
G43611	Persistent migraine aura with cerebral infarction, intractable, with status migrainosus
G43619	Persistent migraine aura with cerebral infarction, intractable, without status migrainosus
I6300	Cerebral infarction due to thrombosis of unspecified precerebral artery

I63011	Cerebral infarction due to thrombosis of right vertebral artery
I63012	Cerebral infarction due to thrombosis of left vertebral artery
I63013	Cerebral infarction due to thrombosis of bilateral vertebral arteries
I63019	Cerebral infarction due to thrombosis of unspecified vertebral artery
I6302	Cerebral infarction due to thrombosis of basilar artery
I63031	Cerebral infarction due to thrombosis of right carotid artery
I63032	Cerebral infarction due to thrombosis of left carotid artery
I63033	Cerebral infarction due to thrombosis of bilateral carotid arteries
I63039	Cerebral infarction due to thrombosis of unspecified carotid artery
I6309	Cerebral infarction due to thrombosis of other precerebral artery
I6310	Cerebral infarction due to embolism of unspecified precerebral artery
I63111	Cerebral infarction due to embolism of right vertebral artery
I63112	Cerebral infarction due to embolism of left vertebral artery
I63113	Cerebral infarction due to embolism of bilateral vertebral arteries
I63119	Cerebral infarction due to embolism of unspecified vertebral artery
I6312	Cerebral infarction due to embolism of basilar artery
I63131	Cerebral infarction due to embolism of right carotid artery
I63132	Cerebral infarction due to embolism of left carotid artery
I63133	Cerebral infarction due to embolism of bilateral carotid arteries
I63139	Cerebral infarction due to embolism of unspecified carotid artery
I6319	Cerebral infarction due to embolism of other precerebral artery
I6320	Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral arteries
I63211	Cerebral infarction due to unspecified occlusion or stenosis of right vertebral artery
I63212	Cerebral infarction due to unspecified occlusion or stenosis of left vertebral artery
I63213	Cerebral infarction due to unspecified occlusion or stenosis of bilateral vertebral arteries
I63219	Cerebral infarction due to unspecified occlusion or stenosis of unspecified vertebral artery
I6322	Cerebral infarction due to unspecified occlusion or stenosis of basilar artery
I63231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries
I63232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries
I63233	Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries
I63239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid artery
I6329	Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries
I6330	Cerebral infarction due to thrombosis of unspecified cerebral artery
I63311	Cerebral infarction due to thrombosis of right middle cerebral artery
I63312	Cerebral infarction due to thrombosis of left middle cerebral artery
I63313	Cerebral infarction due to thrombosis of bilateral middle cerebral arteries
I63319	Cerebral infarction due to thrombosis of unspecified middle cerebral artery
I63321	Cerebral infarction due to thrombosis of right anterior cerebral artery
I63322	Cerebral infarction due to thrombosis of left anterior cerebral artery
I63323	Cerebral infarction due to thrombosis of bilateral anterior cerebral arteries
I63329	Cerebral infarction due to thrombosis of unspecified anterior cerebral artery

I63331	Cerebral infarction due to thrombosis of right posterior cerebral artery
I63332	Cerebral infarction due to thrombosis of left posterior cerebral artery
I63333	Cerebral infarction due to thrombosis of bilateral posterior cerebral arteries
I63339	Cerebral infarction due to thrombosis of unspecified posterior cerebral artery
I63341	Cerebral infarction due to thrombosis of right cerebellar artery
I63342	Cerebral infarction due to thrombosis of left cerebellar artery
I63343	Cerebral infarction due to thrombosis of bilateral cerebellar arteries
I63349	Cerebral infarction due to thrombosis of unspecified cerebellar artery
I6339	Cerebral infarction due to thrombosis of other cerebral artery
I6340	Cerebral infarction due to embolism of unspecified cerebral artery
I63411	Cerebral infarction due to embolism of right middle cerebral artery
I63412	Cerebral infarction due to embolism of left middle cerebral artery
I63413	Cerebral infarction due to embolism of bilateral middle cerebral arteries
I63419	Cerebral infarction due to embolism of unspecified middle cerebral artery
I63421	Cerebral infarction due to embolism of right anterior cerebral artery
I63422	Cerebral infarction due to embolism of left anterior cerebral artery
I63423	Cerebral infarction due to embolism of bilateral anterior cerebral arteries
I63429	Cerebral infarction due to embolism of unspecified anterior cerebral artery
I63431	Cerebral infarction due to embolism of right posterior cerebral artery
I63432	Cerebral infarction due to embolism of left posterior cerebral artery
I63433	Cerebral infarction due to embolism of bilateral posterior cerebral arteries
I63439	Cerebral infarction due to embolism of unspecified posterior cerebral artery
I63441	Cerebral infarction due to embolism of right cerebellar artery
I63442	Cerebral infarction due to embolism of left cerebellar artery
I63443	Cerebral infarction due to embolism of bilateral cerebellar arteries
I63449	Cerebral infarction due to embolism of unspecified cerebellar artery
I6349	Cerebral infarction due to embolism of other cerebral artery
I6350	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery
I63511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery
I63512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery
I63513	Cerebral infarction due to unspecified occlusion or stenosis of bilateral middle cerebral arteries
I63519	Cerebral infarction due to unspecified occlusion or stenosis of unspecified middle cerebral artery
I63521	Cerebral infarction due to unspecified occlusion or stenosis of right anterior cerebral artery
I63522	Cerebral infarction due to unspecified occlusion or stenosis of left anterior cerebral artery
I63523	Cerebral infarction due to unspecified occlusion or stenosis of bilateral anterior cerebral arteries
I63529	Cerebral infarction due to unspecified occlusion or stenosis of unspecified anterior cerebral artery
I63531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery
I63532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery
I63533	Cerebral infarction due to unspecified occlusion or stenosis of bilateral posterior cerebral arteries
I63539	Cerebral infarction due to unspecified occlusion or stenosis of unspecified posterior cerebral artery
I63541	Cerebral infarction due to unspecified occlusion or stenosis of right cerebellar artery

I63542	Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery
I63543	Cerebral infarction due to unspecified occlusion or stenosis of bilateral cerebellar arteries
I63549	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebellar artery
I6359	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery
I636	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic
I638	Other cerebral infarction
I6381	Other cerebral infarction due to occlusion or stenosis of small artery
I6389	Other cerebral infarction
I639	Cerebral infarction, unspecified
I610	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical
I611	Nontraumatic intracerebral hemorrhage in hemisphere, cortical
I612	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified
I613	Nontraumatic intracerebral hemorrhage in brain stem
I614	Nontraumatic intracerebral hemorrhage in cerebellum
I615	Nontraumatic intracerebral hemorrhage, intraventricular
I616	Nontraumatic intracerebral hemorrhage, multiple localized
I618	Other nontraumatic intracerebral hemorrhage
I619	Nontraumatic intracerebral hemorrhage, unspecified

A9: THROMBOPHLEBITIS

ICD-10-CM Code	Description
G08	Intracranial and intraspinal phlebitis and thrombophlebitis
I8000	Phlebitis and thrombophlebitis of superficial vessels of unspecified lower extremity
I8001	Phlebitis and thrombophlebitis of superficial vessels of right lower extremity
I8002	Phlebitis and thrombophlebitis of superficial vessels of left lower extremity
I8003	Phlebitis and thrombophlebitis of superficial vessels of lower extremities, bilateral
I8010	Phlebitis and thrombophlebitis of unspecified femoral vein
I8011	Phlebitis and thrombophlebitis of right femoral vein
I8012	Phlebitis and thrombophlebitis of left femoral vein
I8013	Phlebitis and thrombophlebitis of femoral vein, bilateral
I80201	Phlebitis and thrombophlebitis of unspecified deep vessels of right lower extremity
I80202	Phlebitis and thrombophlebitis of unspecified deep vessels of left lower extremity
I80203	Phlebitis and thrombophlebitis of unspecified deep vessels of lower extremities, bilateral
I80209	Phlebitis and thrombophlebitis of unspecified deep vessels of unspecified lower extremity
I80211	Phlebitis and thrombophlebitis of right iliac vein
I80212	Phlebitis and thrombophlebitis of left iliac vein
I80213	Phlebitis and thrombophlebitis of iliac vein, bilateral
I80219	Phlebitis and thrombophlebitis of unspecified iliac vein
I80221	Phlebitis and thrombophlebitis of right popliteal vein

I80222	Phlebitis and thrombophlebitis of left popliteal vein
I80223	Phlebitis and thrombophlebitis of popliteal vein, bilateral
I80229	Phlebitis and thrombophlebitis of unspecified popliteal vein
I80231	Phlebitis and thrombophlebitis of right tibial vein
I80232	Phlebitis and thrombophlebitis of left tibial vein
I80233	Phlebitis and thrombophlebitis of tibial vein, bilateral
I80239	Phlebitis and thrombophlebitis of unspecified tibial vein
I80291	Phlebitis and thrombophlebitis of other deep vessels of right lower extremity
I80292	Phlebitis and thrombophlebitis of other deep vessels of left lower extremity
I80293	Phlebitis and thrombophlebitis of other deep vessels of lower extremity, bilateral
I80299	Phlebitis and thrombophlebitis of other deep vessels of unspecified lower extremity
I803	Phlebitis and thrombophlebitis of lower extremities, unspecified
I808	Phlebitis and thrombophlebitis of other sites
I809	Phlebitis and thrombophlebitis of unspecified site
I821	Thrombophlebitis migrans
O2220	Superficial thrombophlebitis in pregnancy, unspecified trimester
O2221	Superficial thrombophlebitis in pregnancy, first trimester
O2222	Superficial thrombophlebitis in pregnancy, second trimester
O2223	Superficial thrombophlebitis in pregnancy, third trimester
O8681	Puerperal septic thrombophlebitis
O870	Superficial thrombophlebitis in the puerperium

A10: UNSPECIFIED CRISIS

ICD-10-CM Code	Description
D5700	Hb-SS disease with crisis, unspecified
D57219	Sickle-cell/Hb-C disease with crisis, unspecified
D57419	Sickle-cell thalassemia with crisis, unspecified
D57819	Other sickle-cell disorders with crisis, unspecified

A11: ASTHMA

ICD-10-CM Code	Descriptor
J4520	Mild intermittent asthma, uncomplicated
J4521	Mild intermittent asthma with (acute) exacerbation
J4522	Mild intermittent asthma with status asthmaticus
J4530	Mild persistent asthma, uncomplicated
J4531	Mild persistent asthma with (acute) exacerbation
J4532	Mild persistent asthma with status asthmaticus
J4540	Moderate persistent asthma, uncomplicated
J4541	Moderate persistent asthma with (acute) exacerbation
J4542	Moderate persistent asthma with status asthmaticus
J4550	Severe persistent asthma, uncomplicated
J4551	Severe persistent asthma with (acute) exacerbation
J4552	Severe persistent asthma with status asthmaticus
J45901	Unspecified asthma with (acute) exacerbation
J45902	Unspecified asthma with status asthmaticus
J45909	Unspecified asthma, uncomplicated
J45990	Exercise induced bronchospasm
J45991	Cough variant asthma
J45998	Other asthma

A12: BLINDNESS/LOW VISION

ICD-10-CM Code	Descriptor
H540	Blindness, both eyes
H540X33	Blindness right eye category 3, blindness left eye category 3
H540X34	Blindness right eye category 3, blindness left eye category 4
H540X35	Blindness right eye category 3, blindness left eye category 5
H540X43	Blindness right eye category 4, blindness left eye category 3
H540X44	Blindness right eye category 4, blindness left eye category 4
H540X45	Blindness right eye category 4, blindness left eye category 5
H540X53	Blindness right eye category 5, blindness left eye category 3
H540X54	Blindness right eye category 5, blindness left eye category 4
H540X55	Blindness right eye category 5, blindness left eye category 5
H5410	Blindness, one eye, low vision other eye, unspecified eyes
H5411	Blindness, right eye, low vision left eye
H541131	Blindness right eye category 3, low vision left eye category 1
H541132	Blindness right eye category 3, low vision left eye category 2
H541141	Blindness right eye category 4, low vision left eye category 1
H541142	Blindness right eye category 4, low vision left eye category 2

H541151	Blindness right eye category 5, low vision left eye category 1
H541152	Blindness right eye category 5, low vision left eye category 2
H5412	Blindness, left eye, low vision right eye
H541213	Low vision right eye category 1, blindness left eye category 3
H541214	Low vision right eye category 1, blindness left eye category 4
H541215	Low vision right eye category 1, blindness left eye category 5
H541223	Low vision right eye category 2, blindness left eye category 3
H541224	Low vision right eye category 2, blindness left eye category 4
H541225	Low vision right eye category 2, blindness left eye category 5
H542	Low vision, both eyes
H542X11	Low vision right eye category 1, low vision left eye category 1
H542X12	Low vision right eye category 1, low vision left eye category 2
H542X21	Low vision right eye category 2, low vision left eye category 1
H542X22	Low vision right eye category 2, low vision left eye category 2
H543	Unqualified visual loss, both eyes
H5440	Blindness, one eye, unspecified eye
H5441	Blindness, right eye, normal vision left eye
H54413A	Blindness right eye category 3, normal vision left eye
H54414A	Blindness right eye category 4, normal vision left eye
H54415A	Blindness right eye category 5, normal vision left eye
H5442	Blindness, left eye, normal vision right eye
H5442A3	Blindness left eye category 3, normal vision right eye
H5442A4	Blindness left eye category 4, normal vision right eye
H5442A5	Blindness left eye category 5, normal vision right eye
H5450	Low vision, one eye, unspecified eye
H5451	Low vision, right eye, normal vision left eye
H54511A	Low vision right eye category 1, normal vision left eye
H54512A	Low vision right eye category 2, normal vision left eye
H5452	Low vision, left eye, normal vision right eye
H5452A1	Low vision left eye category 1, normal vision right eye
H5452A2	Low vision left eye category 2, normal vision right eye
H5460	Unqualified visual loss, one eye, unspecified
H5461	Unqualified visual loss, right eye, normal vision left eye
H5462	Unqualified visual loss, left eye, normal vision right eye
H547	Unspecified visual loss
H548	Legal blindness, as defined in USA

A13: CHRONIC KIDNEY DISEASE

ICD-10-CM Code	Descriptor
E0821	Diabetes mellitus due to underlying condition with diabetic nephropathy
E0822	Diabetes mellitus due to underlying condition with diabetic chronic kidney disease
E0829	Diabetes mellitus due to underlying condition with other diabetic kidney complication
E0921	Drug or chemical induced diabetes mellitus with diabetic nephropathy
E0922	Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease
E0929	Drug or chemical induced diabetes mellitus with other diabetic kidney complication
E1021	Type 1 diabetes mellitus with diabetic nephropathy
E1022	Type 1 diabetes mellitus with diabetic chronic kidney disease
E1029	Type 1 diabetes mellitus with other diabetic kidney complication
E1121	Type 2 diabetes mellitus with diabetic nephropathy
E1122	Type 2 diabetes mellitus with diabetic chronic kidney disease
E1129	Type 2 diabetes mellitus with other diabetic kidney complication
E1321	Other specified diabetes mellitus with diabetic nephropathy
E1322	Other specified diabetes mellitus with diabetic chronic kidney disease
E1329	Other specified diabetes mellitus with other diabetic kidney complication
I120	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease
I129	Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease
I130	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease
I1310	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease
I1311	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease
I132	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease
K767	Hepatorenal syndrome
M1030	Gout due to renal impairment, unspecified site
M10311	Gout due to renal impairment, right shoulder
M10312	Gout due to renal impairment, left shoulder
M10319	Gout due to renal impairment, unspecified shoulder
M10321	Gout due to renal impairment, right elbow
M10322	Gout due to renal impairment, left elbow
M10329	Gout due to renal impairment, unspecified elbow
M10331	Gout due to renal impairment, right wrist
M10332	Gout due to renal impairment, left wrist
M10339	Gout due to renal impairment, unspecified wrist

M10341	Gout due to renal impairment, right hand
M10342	Gout due to renal impairment, left hand
M10349	Gout due to renal impairment, unspecified hand
M10351	Gout due to renal impairment, right hip
M10352	Gout due to renal impairment, left hip
M10359	Gout due to renal impairment, unspecified hip
M10361	Gout due to renal impairment, right knee
M10362	Gout due to renal impairment, left knee
M10369	Gout due to renal impairment, unspecified knee
M10371	Gout due to renal impairment, right ankle and foot
M10372	Gout due to renal impairment, left ankle and foot
M10379	Gout due to renal impairment, unspecified ankle and foot
M1038	Gout due to renal impairment, vertebrae
M1039	Gout due to renal impairment, multiple sites
M3214	Glomerular disease in systemic lupus erythematosus
M3215	Tubulo-interstitial neuropath in sys lupus erythematosus
M3504	Sicca syndrome with tubulo-interstitial nephropathy
N000	Acute nephritic syndrome with minor glomerular abnormality
N001	Acute nephritic syndrome with focal and segmental glomerular lesions
N002	Acute nephritic syndrome with diffuse membranous glomerulonephritis
N003	Acute nephritic syndrome with diffuse mesangial proliferative glomerulonephritis
N004	Acute nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis
N005	Acute nephritic syndrome with diffuse mesangiocapillary glomerulonephritis
N006	Acute nephritic syndrome with dense deposit disease
N007	Acute nephritic syndrome with diffuse crescentic glomerulonephritis
N008	Acute nephritic syndrome with other morphologic changes
N009	Acute nephritic syndrome with unspecified morphologic changes
N010	Rapidly progressive nephritic syndrome with minor glomerular abnormality
N011	Rapidly progressive nephritic syndrome with focal and segmental glomerular lesions
N012	Rapidly progressive nephritic syndrome with diffuse membranous glomerulonephritis
N013	Rapidly progressive nephritic syndrome with diffuse mesangial proliferative glomerulonephritis
N014	Rapidly progressive nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis
N015	Rapidly progressive nephritic syndrome with diffuse mesangiocapillary glomerulonephritis
N016	Rapidly progressive nephritic syndrome with dense deposit disease
N017	Rapidly progressive nephritic syndrome with diffuse crescentic glomerulonephritis
N018	Rapidly progressive nephritic syndrome with other morphologic changes
N019	Rapidly progressive nephritic syndrome with unspecified morphologic changes
N020	Recurrent and persistent hematuria with minor glomerular abnormality
N021	Recurrent and persistent hematuria with focal and segmental glomerular lesions
N022	Recurrent and persistent hematuria with diffuse membranous glomerulonephritis
N023	Recurrent and persistent hematuria with diffuse mesangial proliferative glomerulonephritis

N024	Recurrent and persistent hematuria with diffuse endocapillary proliferative glomerulonephritis
N025	Recurrent and persistent hematuria with diffuse mesangiocapillary glomerulonephritis
N026	Recurrent and persistent hematuria with dense deposit disease
N027	Recurrent and persistent hematuria with diffuse crescentic glomerulonephritis
N028	Recurrent and persistent hematuria with other morphologic changes
N029	Recurrent and persistent hematuria with unspecified morphologic changes
N030	Chronic nephritic syndrome with minor glomerular abnormality
N031	Chronic nephritic syndrome with focal and segmental glomerular lesions
N032	Chronic nephritic syndrome with diffuse membranous glomerulonephritis
N033	Chronic nephritic syndrome with diffuse mesangial proliferative glomerulonephritis
N034	Chronic nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis
N035	Chronic nephritic syndrome with diffuse mesangiocapillary glomerulonephritis
N036	Chronic nephritic syndrome with dense deposit disease
N037	Chronic nephritic syndrome with diffuse crescentic glomerulonephritis
N038	Chronic nephritic syndrome with other morphologic changes
N039	Chronic nephritic syndrome with unspecified morphologic changes
N040	Nephrotic syndrome with minor glomerular abnormality
N041	Nephrotic syndrome with focal and segmental glomerular lesions
N042	Nephrotic syndrome with diffuse membranous glomerulonephritis
N043	Nephrotic syndrome with diffuse mesangial proliferative glomerulonephritis
N044	Nephrotic syndrome with diffuse endocapillary proliferative glomerulonephritis
N045	Nephrotic syndrome with diffuse mesangiocapillary glomerulonephritis
N046	Nephrotic syndrome with dense deposit disease
N047	Nephrotic syndrome with diffuse crescentic glomerulonephritis
N048	Nephrotic syndrome with other morphologic changes
N049	Nephrotic syndrome with unspecified morphologic changes
N050	Unspecified nephritic syndrome with minor glomerular abnormality
N051	Unspecified nephritic syndrome with focal and segmental glomerular lesions
N052	Unspecified nephritic syndrome with diffuse membranous glomerulonephritis
N053	Unspecified nephritic syndrome with diffuse mesangial proliferative glomerulonephritis
N054	Unspecified nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis
N055	Unspecified nephritic syndrome with diffuse mesangiocapillary glomerulonephritis
N056	Unspecified nephritic syndrome with dense deposit disease
N057	Unspecified nephritic syndrome with diffuse crescentic glomerulonephritis
N058	Unspecified nephritic syndrome with other morphologic changes
N059	Unspecified nephritic syndrome with unspecified morphologic changes
N060	Isolated proteinuria with minor glomerular abnormality
N061	Isolated proteinuria with focal and segmental glomerular lesions
N062	Isolated proteinuria with diffuse membranous glomerulonephritis
N063	Isolated proteinuria with diffuse mesangial proliferative glomerulonephritis
N064	Isolated proteinuria with diffuse endocapillary proliferative glomerulonephritis

N065	Isolated proteinuria with diffuse mesangiocapillary glomerulonephritis
N066	Isolated proteinuria with dense deposit disease
N067	Isolated proteinuria with diffuse crescentic glomerulonephritis
N068	Isolated proteinuria with other morphologic lesion
N069	Isolated proteinuria with unspecified morphologic lesion
N070	Hereditary nephropathy, not elsewhere classified with minor glomerular abnormality
N071	Hereditary nephropathy, not elsewhere classified with focal and segmental glomerular lesions
N072	Hereditary nephropathy, not elsewhere classified with diffuse membranous glomerulonephritis
N073	Hereditary nephropathy, not elsewhere classified with diffuse mesangial proliferative glomerulonephritis
N074	Hereditary nephropathy, not elsewhere classified with diffuse endocapillary proliferative glomerulonephritis
N075	Hereditary nephropathy, not elsewhere classified with diffuse mesangiocapillary glomerulonephritis
N076	Hereditary nephropathy, not elsewhere classified with dense deposit disease
N077	Hereditary nephropathy, not elsewhere classified with diffuse crescentic glomerulonephritis
N078	Hereditary nephropathy, not elsewhere classified with other morphologic lesions
N079	Hereditary nephropathy, not elsewhere classified with unspecified morphologic lesions
N08	Glomerular disorders in diseases classified elsewhere
N130	Hydronephrosis with ureteropelvic junction obstruction
N131	Hydronephrosis with ureteral stricture, not elsewhere classified
N132	Hydronephrosis with renal and ureteral calculous obstruction
N1330	Unspecified hydronephrosis
N1339	Other hydronephrosis
N140	Analgesic nephropathy
N141	Nephropathy induced by other drugs, medicaments and biological substances
N142	Nephropathy induced by unspecified drug, medicament or biological substance
N143	Nephropathy induced by heavy metals
N144	Toxic nephropathy, not elsewhere classified
N150	Balkan nephropathy
N158	Other specified renal tubulo-interstitial diseases
N159	Renal tubulo-interstitial disease, unspecified
N16	Renal tubulo-interstitial disorders in diseases classified elsewhere
N170	Acute kidney failure with tubular necrosis
N171	Acute kidney failure with acute cortical necrosis
N172	Acute kidney failure with medullary necrosis
N178	Other acute kidney failure
N179	Acute kidney failure, unspecified
N181	Chronic kidney disease, stage 1
N182	Chronic kidney disease, stage 2 (mild)
N183	Chronic kidney disease, stage 3 (moderate)
N184	Chronic kidney disease, stage 4 (severe)

N185	Chronic kidney disease, stage 5
N186	End stage renal disease
N189	Chronic kidney disease, unspecified
N19	Unspecified kidney failure
N250	Renal osteodystrophy
N251	Nephrogenic diabetes insipidus
N2581	Secondary hyperparathyroidism of renal origin
N2589	Other disorders resulting from impaired renal tubular function
N259	Disorder resulting from impaired renal tubular function, unspecified
N261	Atrophy of kidney (terminal)
N269	Renal sclerosis, unspecified
Q6102	Congenital multiple renal cysts
Q6111	Cystic dilatation of collecting ducts
Q6119	Other polycystic kidney, infantile type
Q612	Polycystic kidney, adult type
Q613	Polycystic kidney, unspecified
Q614	Renal dysplasia
Q615	Medullary cystic kidney
Q618	Other cystic kidney diseases
Q620	Congenital hydronephrosis
Q6210	Congenital occlusion of ureter, unspecified
Q6211	Congenital occlusion of ureteropelvic junction
Q6212	Congenital occlusion of ureterovesical orifice
Q6231	Congenital ureterocele, orthotopic
Q6232	Cecoureterocele
Q6239	Other obstructive defects of renal pelvis and ureter
R944	Abnormal results of kidney function studies

A14: COGNITIVE IMPAIRMENT

ICD-10-CM Code	Descriptor
I6930	Unspecified sequelae of cerebral infarction
I6931	Cognitive deficits following cerebral infarction
I69310	Attention and concentration deficit following cerebral infarction
I69311	Memory deficit following cerebral infarction
I69312	Visuospatial deficit and spatial neglect following cerebral infarction
I69313	Psychomotor deficit following cerebral infarction
I69314	Frontal lobe and executive function deficit following cerebral infarction
I69315	Cognitive social or emotional deficit following cerebral infarction
I69318	Other symptoms and signs involving cognitive functions following cerebral infarction

I69319	Unspecified symptoms and signs involving cognitive functions following cerebral infarction
I69320	Aphasia following cerebral infarction
I69321	Dysphasia following cerebral infarction
I69322	Dysarthria following cerebral infarction
I69323	Fluency disorder following cerebral infarction
I69328	Other speech and language deficits following cerebral infarction
I69390	Apraxia following cerebral infarction
I69398	Other sequelae of cerebral infarction
I6910	Unspecified sequelae of nontraumatic intracerebral hemorrhage
I6911	Cognitive deficits following nontraumatic intracerebral hemorrhage
I69110	Attention and concentration deficit following nontraumatic intracerebral hemorrhage
I69111	Memory deficit following nontraumatic intracerebral hemorrhage
I69112	Visuospatial deficit and spatial neglect following nontraumatic intracerebral hemorrhage
I69113	Psychomotor deficit following nontraumatic intracerebral hemorrhage
I69114	Frontal lobe and executive function deficit following nontraumatic intracerebral hemorrhage
I69115	Cognitive social or emotional deficit following nontraumatic intracerebral hemorrhage
I69118	Other symptoms and signs involving cognitive functions following nontraumatic intracerebral hemorrhage
I69119	Unspecified symptoms and signs involving cognitive functions following nontraumatic intracerebral hemorrhage
I69120	Aphasia following nontraumatic intracerebral hemorrhage
I69121	Dysphasia following nontraumatic intracerebral hemorrhage
I69122	Dysarthria following nontraumatic intracerebral hemorrhage
I69123	Fluency disorder following nontraumatic intracerebral hemorrhage
I69128	Other speech and language deficits following nontraumatic intracerebral hemorrhage
I69190	Apraxia following nontraumatic intracerebral hemorrhage
I69198	Other sequelae of nontraumatic intracerebral hemorrhage
G3184	Mild cognitive impairment, so stated
I6901	Cognitive deficits following nontraumatic subarachnoid hemorrhage
I69015	Cognitive social or emotional deficit following nontraumatic subarachnoid hemorrhage
I69018	Other symptoms and signs involving cognitive functions following nontraumatic subarachnoid hemorrhage
I69019	Unspecified symptoms and signs involving cognitive functions following nontraumatic subarachnoid hemorrhage
I6921	Cognitive deficits following other nontraumatic intracranial hemorrhage
I69215	Cognitive social or emotional deficit following other nontraumatic intracranial hemorrhage
I69218	Other symptoms and signs involving cognitive functions following other nontraumatic intracranial hemorrhage
I69219	Unspecified symptoms and signs involving cognitive functions following other nontraumatic intracranial hemorrhage
I6981	Cognitive deficits following other cerebrovascular disease
I69815	Cognitive social or emotional deficit following other cerebrovascular disease
I69818	Other symptoms and signs involving cognitive functions following other cerebrovascular disease

I69819	Unspecified symptoms and signs involving cognitive functions following other cerebrovascular disease
I6991	Cognitive deficits following unspecified cerebrovascular disease
I69915	Cognitive social or emotional deficit following unspecified cerebrovascular disease
I69918	Other symptoms and signs involving cognitive functions following unspecified cerebrovascular disease
I69919	Unspecified symptoms and signs involving cognitive functions following unspecified cerebrovascular disease
R4181	Age-related cognitive decline
R41841	Cognitive communication deficit
R4189	Other symptoms and signs involving cognitive functions and awareness
R419	Unspecified symptoms and signs involving cognitive functions and awareness
F0150	Vascular dementia without behavioral disturbance
F0151	Vascular dementia with behavioral disturbance
F0280	Dementia in other diseases classified elsewhere without behavioral disturbance
F0281	Dementia in other diseases classified elsewhere with behavioral disturbance
F0390	Unspecified dementia without behavioral disturbance
F0391	Unspecified dementia with behavioral disturbance
G3109	Other frontotemporal dementia

A15: CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

ICD-10-CM	
Code	Descriptor
J40	Bronchitis, not specified as acute or chronic
J411	Mucopurulent chronic bronchitis
J418	Mixed simple and mucopurulent chronic bronchitis
J42	Unspecified chronic bronchitis
J430	Unilateral pulmonary emphysema [MacLeod's syndrome]
J431	Panlobular emphysema
J432	Centrilobular emphysema
J438	Other emphysema
J439	Emphysema, unspecified
J440	Chronic obstructive pulmon disease w acute lower resp infct
J441	Chronic obstructive pulmonary disease w (acute) exacerbation
J449	Chronic obstructive pulmonary disease, unspecified
J470	Bronchiectasis with acute lower respiratory infection
J471	Bronchiectasis with (acute) exacerbation
J479	Bronchiectasis, uncomplicated

A16: GALLSTONES

ICD-10-CM Code	Descriptor
K8000	Calculus of gallbladder with acute cholecystitis without obstruction
K8001	Calculus of gallbladder with acute cholecystitis with obstruction
K8010	Calculus of gallbladder with chronic cholecystitis without obstruction
K8011	Calculus of gallbladder with chronic cholecystitis with obstruction
K8012	Calculus of gallbladder with acute and chronic cholecystitis without obstruction
K8013	Calculus of gallbladder with acute and chronic cholecystitis with obstruction
K8018	Calculus of gallbladder with other cholecystitis without obstruction
K8019	Calculus of gallbladder with other cholecystitis with obstruction
K8020	Calculus of gallbladder without cholecystitis without obstruction
K8021	Calculus of gallbladder without cholecystitis with obstruction
K8030	Calculus of bile duct with cholangitis, unspecified, without obstruction
K8031	Calculus of bile duct with cholangitis, unspecified, with obstruction
K8032	Calculus of bile duct with acute cholangitis without obstruction
K8033	Calculus of bile duct with acute cholangitis with obstruction
K8034	Calculus of bile duct with chronic cholangitis without obstruction
K8035	Calculus of bile duct with chronic cholangitis with obstruction
K8036	Calculus of bile duct with acute and chronic cholangitis without obstruction
K8037	Calculus of bile duct with acute and chronic cholangitis with obstruction
K8040	Calculus of bile duct with cholecystitis, unspecified, without obstruction
K8041	Calculus of bile duct with cholecystitis, unspecified, with obstruction
K8042	Calculus of bile duct with acute cholecystitis without obstruction
K8043	Calculus of bile duct with acute cholecystitis with obstruction
K8044	Calculus of bile duct with chronic cholecystitis without obstruction
K8045	Calculus of bile duct with chronic cholecystitis with obstruction
K8046	Calculus of bile duct with acute and chronic cholecystitis without obstruction
K8047	Calculus of bile duct with acute and chronic cholecystitis with obstruction
K8050	Calculus of bile duct without cholangitis or cholecystitis without obstruction
K8051	Calculus of bile duct without cholangitis or cholecystitis with obstruction
K8060	Calculus of gallbladder and bile duct with cholecystitis, unspecified, without obstruction
K8061	Calculus of gallbladder and bile duct with cholecystitis, unspecified, with obstruction
K8062	Calculus of gallbladder and bile duct with acute cholecystitis without obstruction
K8063	Calculus of gallbladder and bile duct with acute cholecystitis with obstruction
K8064	Calculus of gallbladder and bile duct with chronic cholecystitis without obstruction
K8065	Calculus of gallbladder and bile duct with chronic cholecystitis with obstruction
K8066	Calculus of gallbladder and bile duct with acute and chronic cholecystitis without obstruction
K8067	Calculus of gallbladder and bile duct with acute and chronic cholecystitis with obstruction

K8070	Calculus of gallbladder and bile duct without cholecystitis without obstruction
K8071	Calculus of gallbladder and bile duct without cholecystitis with obstruction

A17: HEART FAILURE

ICD-10-CM Code	Descriptor
I0981	Rheumatic heart failure
I110	Hypertensive heart disease with heart failure
I130	Hyp hrt & chr kdny dis w hrt fail and stg 1-4/unsp chr kdny
I132	Hyp hrt & chr kdny dis w hrt fail and w stg 5 chr kdny/ESRD
I501	Left ventricular failure, unspecified
I5020	Unspecified systolic (congestive) heart failure
I5021	Acute systolic (congestive) heart failure
I5022	Chronic systolic (congestive) heart failure
I5023	Acute on chronic systolic (congestive) heart failure
I5030	Unspecified diastolic (congestive) heart failure
I5031	Acute diastolic (congestive) heart failure
I5032	Chronic diastolic (congestive) heart failure
I5033	Acute on chronic diastolic (congestive) heart failure
I5040	Unsp combined systolic and diastolic (congestive) hrt fail
I5041	Acute combined systolic and diastolic (congestive) hrt fail
I5042	Chronic combined systolic and diastolic hrt fail
I5043	Acute on chronic combined systolic and diastolic hrt fail
I50810	Right heart failure, unspecified
I50811	Acute right heart failure
I50812	Chronic right heart failure
I50813	Acute on chronic right heart failure
I50814	Right heart failure due to left heart failure
I5082	Biventricular heart failure
I5083	High output heart failure
I5084	End stage heart failure
I5089	Other heart failure
I509	Heart failure, unspecified

A18: NON-PRESSURE ULCER LOWER EXTREMITY

ICD-10-CM Code	Descriptor
L97101	Non-pressure chronic ulcer of unspecified thigh limited to breakdown of skin
L97102	Non-pressure chronic ulcer of unspecified thigh with fat layer exposed
L97103	Non-pressure chronic ulcer of unspecified thigh with necrosis of muscle
L97104	Non-pressure chronic ulcer of unspecified thigh with necrosis of bone
L97105	Non-pressure chronic ulcer of unspecified thigh with muscle involvement without evidence of necrosis
L97106	Non-pressure chronic ulcer of unspecified thigh with bone involvement without evidence of necrosis
L97108	Non-pressure chronic ulcer of unspecified thigh with other specified severity
L97109	Non-pressure chronic ulcer of unspecified thigh with unspecified severity
L97111	Non-pressure chronic ulcer of right thigh limited to breakdown of skin
L97112	Non-pressure chronic ulcer of right thigh with fat layer exposed
L97113	Non-pressure chronic ulcer of right thigh with necrosis of muscle
L97114	Non-pressure chronic ulcer of right thigh with necrosis of bone
L97115	Non-pressure chronic ulcer of right thigh with muscle involvement without evidence of necrosis
L97116	Non-pressure chronic ulcer of right thigh with bone involvement without evidence of necrosis
L97118	Non-pressure chronic ulcer of right thigh with other specified severity
L97119	Non-pressure chronic ulcer of right thigh with unspecified severity
L97121	Non-pressure chronic ulcer of left thigh limited to breakdown of skin
L97122	Non-pressure chronic ulcer of left thigh with fat layer exposed
L97123	Non-pressure chronic ulcer of left thigh with necrosis of muscle
L97124	Non-pressure chronic ulcer of left thigh with necrosis of bone
L97125	Non-pressure chronic ulcer of left thigh with muscle involvement without evidence of necrosis
L97126	Non-pressure chronic ulcer of left thigh with bone involvement without evidence of necrosis
L97128	Non-pressure chronic ulcer of left thigh with other specified severity
L97129	Non-pressure chronic ulcer of left thigh with unspecified severity
L97201	Non-pressure chronic ulcer of unspecified calf limited to breakdown of skin
L97202	Non-pressure chronic ulcer of unspecified calf with fat layer exposed
L97203	Non-pressure chronic ulcer of unspecified calf with necrosis of muscle
L97204	Non-pressure chronic ulcer of unspecified calf with necrosis of bone
L97205	Non-pressure chronic ulcer of unspecified calf with muscle involvement without evidence of necrosis
L97206	Non-pressure chronic ulcer of unspecified calf with bone involvement without evidence of necrosis
L97208	Non-pressure chronic ulcer of unspecified calf with other specified severity
L97209	Non-pressure chronic ulcer of unspecified calf with unspecified severity
L97211	Non-pressure chronic ulcer of right calf limited to breakdown of skin
L97212	Non-pressure chronic ulcer of right calf with fat layer exposed
L97213	Non-pressure chronic ulcer of right calf with necrosis of muscle
L97214	Non-pressure chronic ulcer of right calf with necrosis of bone

L97215	Non-pressure chronic ulcer of right calf with muscle involvement without evidence of necrosis
L97216	Non-pressure chronic ulcer of right calf with bone involvement without evidence of necrosis
L97218	Non-pressure chronic ulcer of right calf with other specified severity
L97219	Non-pressure chronic ulcer of right calf with unspecified severity
L97221	Non-pressure chronic ulcer of left calf limited to breakdown of skin
L97222	Non-pressure chronic ulcer of left calf with fat layer exposed
L97223	Non-pressure chronic ulcer of left calf with necrosis of muscle
L97224	Non-pressure chronic ulcer of left calf with necrosis of bone
L97225	Non-pressure chronic ulcer of left calf with muscle involvement without evidence of necrosis
L97226	Non-pressure chronic ulcer of left calf with bone involvement without evidence of necrosis
L97228	Non-pressure chronic ulcer of left calf with other specified severity
L97229	Non-pressure chronic ulcer of left calf with unspecified severity
L97301	Non-pressure chronic ulcer of unspecified ankle limited to breakdown of skin
L97302	Non-pressure chronic ulcer of unspecified ankle with fat layer exposed
L97303	Non-pressure chronic ulcer of unspecified ankle with necrosis of muscle
L97304	Non-pressure chronic ulcer of unspecified ankle with necrosis of bone
L97305	Non-pressure chronic ulcer of unspecified ankle with muscle involvement without evidence of necrosis
L97306	Non-pressure chronic ulcer of unspecified ankle with bone involvement without evidence of necrosis
L97308	Non-pressure chronic ulcer of unspecified ankle with other specified severity
L97309	Non-pressure chronic ulcer of unspecified ankle with unspecified severity
L97311	Non-pressure chronic ulcer of right ankle limited to breakdown of skin
L97312	Non-pressure chronic ulcer of right ankle with fat layer exposed
L97313	Non-pressure chronic ulcer of right ankle with necrosis of muscle
L97314	Non-pressure chronic ulcer of right ankle with necrosis of bone
L97315	Non-pressure chronic ulcer of right ankle with muscle involvement without evidence of necrosis
L97316	Non-pressure chronic ulcer of right ankle with bone involvement without evidence of necrosis
L97318	Non-pressure chronic ulcer of right ankle with other specified severity
L97319	Non-pressure chronic ulcer of right ankle with unspecified severity
L97321	Non-pressure chronic ulcer of left ankle limited to breakdown of skin
L97322	Non-pressure chronic ulcer of left ankle with fat layer exposed
L97323	Non-pressure chronic ulcer of left ankle with necrosis of muscle
L97324	Non-pressure chronic ulcer of left ankle with necrosis of bone
L97325	Non-pressure chronic ulcer of left ankle with muscle involvement without evidence of necrosis
L97326	Non-pressure chronic ulcer of left ankle with bone involvement without evidence of necrosis
L97328	Non-pressure chronic ulcer of left ankle with other specified severity
L97329	Non-pressure chronic ulcer of left ankle with unspecified severity
L97401	Non-pressure chronic ulcer of unspecified heel and midfoot limited to breakdown of skin
L97402	Non-pressure chronic ulcer of unspecified heel and midfoot with fat layer exposed
L97403	Non-pressure chronic ulcer of unspecified heel and midfoot with necrosis of muscle
L97404	Non-pressure chronic ulcer of unspecified heel and midfoot with necrosis of bone

L97405	Non-pressure chronic ulcer of unspecified heel and midfoot with muscle involvement without evidence of necrosis
L97406	Non-pressure chronic ulcer of unspecified heel and midfoot with bone involvement without evidence of necrosis
L97408	Non-pressure chronic ulcer of unspecified heel and midfoot with other specified severity
L97409	Non-pressure chronic ulcer of unspecified heel and midfoot with unspecified severity
L97411	Non-pressure chronic ulcer of right heel and midfoot limited to breakdown of skin
L97412	Non-pressure chronic ulcer of right heel and midfoot with fat layer exposed
L97413	Non-pressure chronic ulcer of right heel and midfoot with necrosis of muscle
L97414	Non-pressure chronic ulcer of right heel and midfoot with necrosis of bone
L97415	Non-pressure chronic ulcer of right heel and midfoot with muscle involvement without evidence of necrosis
L97416	Non-pressure chronic ulcer of right heel and midfoot with bone involvement without evidence of necrosis
L97418	Non-pressure chronic ulcer of right heel and midfoot with other specified severity
L97419	Non-pressure chronic ulcer of right heel and midfoot with unspecified severity
L97421	Non-pressure chronic ulcer of left heel and midfoot limited to breakdown of skin
L97422	Non-pressure chronic ulcer of left heel and midfoot with fat layer exposed
L97423	Non-pressure chronic ulcer of left heel and midfoot with necrosis of muscle
L97424	Non-pressure chronic ulcer of left heel and midfoot with necrosis of bone
L97425	Non-pressure chronic ulcer of left heel and midfoot with muscle involvement without evidence of necrosis
L97426	Non-pressure chronic ulcer of left heel and midfoot with bone involvement without evidence of necrosis
L97428	Non-pressure chronic ulcer of left heel and midfoot with other specified severity
L97429	Non-pressure chronic ulcer of left heel and midfoot with unspecified severity
L97501	Non-pressure chronic ulcer of other part of unspecified foot limited to breakdown of skin
L97502	Non-pressure chronic ulcer of other part of unspecified foot with fat layer exposed
L97503	Non-pressure chronic ulcer of other part of unspecified foot with necrosis of muscle
L97504	Non-pressure chronic ulcer of other part of unspecified foot with necrosis of bone
L97505	Non-pressure chronic ulcer of other part of unspecified foot with muscle involvement without evidence of necrosis
L97506	Non-pressure chronic ulcer of other part of unspecified foot with bone involvement without evidence of necrosis
L97508	Non-pressure chronic ulcer of other part of unspecified foot with other specified severity
L97509	Non-pressure chronic ulcer of other part of unspecified foot with unspecified severity
L97511	Non-pressure chronic ulcer of other part of right foot limited to breakdown of skin
L97512	Non-pressure chronic ulcer of other part of right foot with fat layer exposed
L97513	Non-pressure chronic ulcer of other part of right foot with necrosis of muscle
L97514	Non-pressure chronic ulcer of other part of right foot with necrosis of bone
L97515	Non-pressure chronic ulcer of other part of right foot with muscle involvement without evidence of necrosis
L97516	Non-pressure chronic ulcer of other part of right foot with bone involvement without evidence of necrosis
L97518	Non-pressure chronic ulcer of other part of right foot with other specified severity

L97519	Non-pressure chronic ulcer of other part of right foot with unspecified severity
L97521	Non-pressure chronic ulcer of other part of left foot limited to breakdown of skin
L97522	Non-pressure chronic ulcer of other part of left foot with fat layer exposed
L97523	Non-pressure chronic ulcer of other part of left foot with necrosis of muscle
L97524	Non-pressure chronic ulcer of other part of left foot with necrosis of bone
L97525	Non-pressure chronic ulcer of other part of left foot with muscle involvement without evidence of necrosis
L97526	Non-pressure chronic ulcer of other part of left foot with bone involvement without evidence of necrosis
L97528	Non-pressure chronic ulcer of other part of left foot with other specified severity
L97529	Non-pressure chronic ulcer of other part of left foot with unspecified severity
L97801	Non-pressure chronic ulcer of other part of unspecified lower leg limited to breakdown of skin
L97802	Non-pressure chronic ulcer of other part of unspecified lower leg with fat layer exposed
L97803	Non-pressure chronic ulcer of other part of unspecified lower leg with necrosis of muscle
L97804	Non-pressure chronic ulcer of other part of unspecified lower leg with necrosis of bone
L97805	Non-pressure chronic ulcer of other part of unspecified lower leg with muscle involvement without evidence of necrosis
L97806	Non-pressure chronic ulcer of other part of unspecified lower leg with bone involvement without evidence of necrosis
L97808	Non-pressure chronic ulcer of other part of unspecified lower leg with other specified severity
L97809	Non-pressure chronic ulcer of other part of unspecified lower leg with unspecified severity
L97811	Non-pressure chronic ulcer of other part of right lower leg limited to breakdown of skin
L97812	Non-pressure chronic ulcer of other part of right lower leg with fat layer exposed
L97813	Non-pressure chronic ulcer of other part of right lower leg with necrosis of muscle
L97814	Non-pressure chronic ulcer of other part of right lower leg with necrosis of bone
L97815	Non-pressure chronic ulcer of other part of right lower leg with muscle involvement without evidence of necrosis
L97816	Non-pressure chronic ulcer of other part of right lower leg with bone involvement without evidence of necrosis
L97818	Non-pressure chronic ulcer of other part of right lower leg with other specified severity
L97819	Non-pressure chronic ulcer of other part of right lower leg with unspecified severity
L97821	Non-pressure chronic ulcer of other part of left lower leg limited to breakdown of skin
L97822	Non-pressure chronic ulcer of other part of left lower leg with fat layer exposed
L97823	Non-pressure chronic ulcer of other part of left lower leg with necrosis of muscle
L97824	Non-pressure chronic ulcer of other part of left lower leg with necrosis of bone
L97825	Non-pressure chronic ulcer of other part of left lower leg with muscle involvement without evidence of necrosis
L97826	Non-pressure chronic ulcer of other part of left lower leg with bone involvement without evidence of necrosis
L97828	Non-pressure chronic ulcer of other part of left lower leg with other specified severity
L97829	Non-pressure chronic ulcer of other part of left lower leg with unspecified severity
L97901	Non-pressure chronic ulcer of unspecified part of unspecified lower leg limited to breakdown of skin
L97902	Non-pressure chronic ulcer of unspecified part of unspecified lower leg with fat layer exposed
L97903	Non-pressure chronic ulcer of unspecified part of unspecified lower leg with necrosis of muscle

L97904	Non-pressure chronic ulcer of unspecified part of unspecified lower leg with necrosis of bone
L97905	Non-pressure chronic ulcer of unspecified part of unspecified lower leg with muscle involvement without evidence of necrosis
L97906	Non-pressure chronic ulcer of unspecified part of unspecified lower leg with bone involvement without evidence of necrosis
L97908	Non-pressure chronic ulcer of unspecified part of unspecified lower leg with other specified severity
L97909	Non-pressure chronic ulcer of unspecified part of unspecified lower leg with unspecified severity
L97911	Non-pressure chronic ulcer of unspecified part of right lower leg limited to breakdown of skin
L97912	Non-pressure chronic ulcer of unspecified part of right lower leg with fat layer exposed
L97913	Non-pressure chronic ulcer of unspecified part of right lower leg with necrosis of muscle
L97914	Non-pressure chronic ulcer of unspecified part of right lower leg with necrosis of bone
L97915	Non-pressure chronic ulcer of unspecified part of right lower leg with muscle involvement without evidence of necrosis
L97916	Non-pressure chronic ulcer of unspecified part of right lower leg with bone involvement without evidence of necrosis
L97918	Non-pressure chronic ulcer of unspecified part of right lower leg with other specified severity
L97919	Non-pressure chronic ulcer of unspecified part of right lower leg with unspecified severity
L97921	Non-pressure chronic ulcer of unspecified part of left lower leg limited to breakdown of skin
L97922	Non-pressure chronic ulcer of unspecified part of left lower leg with fat layer exposed
L97923	Non-pressure chronic ulcer of unspecified part of left lower leg with necrosis of muscle
L97924	Non-pressure chronic ulcer of unspecified part of left lower leg with necrosis of bone
L97925	Non-pressure chronic ulcer of unspecified part of left lower leg with muscle involvement without evidence of necrosis
L97926	Non-pressure chronic ulcer of unspecified part of left lower leg with bone involvement without evidence of necrosis
L97928	Non-pressure chronic ulcer of unspecified part of left lower leg with other specified severity
L97929	Non-pressure chronic ulcer of unspecified part of left lower leg with unspecified severity

A19: OSTEONECROSIS

ICD-10-CM	
Code	Descriptor
M8700	Idiopathic aseptic necrosis of unspecified bone
M87011	Idiopathic aseptic necrosis of right shoulder
M87012	Idiopathic aseptic necrosis of left shoulder
M87019	Idiopathic aseptic necrosis of unspecified shoulder
M87021	Idiopathic aseptic necrosis of right humerus
M87022	Idiopathic aseptic necrosis of left humerus
M87029	Idiopathic aseptic necrosis of unspecified humerus
M87031	Idiopathic aseptic necrosis of right radius
M87032	Idiopathic aseptic necrosis of left radius
M87033	Idiopathic aseptic necrosis of unspecified radius
M87034	Idiopathic aseptic necrosis of right ulna

M87035	Idiopathic aseptic necrosis of left ulna
M87036	Idiopathic aseptic necrosis of unspecified ulna
M87037	Idiopathic aseptic necrosis of right carpus
M87038	Idiopathic aseptic necrosis of left carpus
M87039	Idiopathic aseptic necrosis of unspecified carpus
M87041	Idiopathic aseptic necrosis of right hand
M87042	Idiopathic aseptic necrosis of left hand
M87043	Idiopathic aseptic necrosis of unspecified hand
M87044	Idiopathic aseptic necrosis of right finger(s)
M87045	Idiopathic aseptic necrosis of left finger(s)
M87046	Idiopathic aseptic necrosis of unspecified finger(s)
M87050	Idiopathic aseptic necrosis of pelvis
M87051	Idiopathic aseptic necrosis of right femur
M87052	Idiopathic aseptic necrosis of left femur
M87059	Idiopathic aseptic necrosis of unspecified femur
M87061	Idiopathic aseptic necrosis of right tibia
M87062	Idiopathic aseptic necrosis of left tibia
M87063	Idiopathic aseptic necrosis of unspecified tibia
M87064	Idiopathic aseptic necrosis of right fibula
M87065	Idiopathic aseptic necrosis of left fibula
M87066	Idiopathic aseptic necrosis of unspecified fibula
M87071	Idiopathic aseptic necrosis of right ankle
M87072	Idiopathic aseptic necrosis of left ankle
M87073	Idiopathic aseptic necrosis of unspecified ankle
M87074	Idiopathic aseptic necrosis of right foot
M87075	Idiopathic aseptic necrosis of left foot
M87076	Idiopathic aseptic necrosis of unspecified foot
M87077	Idiopathic aseptic necrosis of right toe(s)
M87078	Idiopathic aseptic necrosis of left toe(s)
M87079	Idiopathic aseptic necrosis of unspecified toe(s)
M8708	Idiopathic aseptic necrosis of bone, other site
M8709	Idiopathic aseptic necrosis of bone, multiple sites
M8730	Other secondary osteonecrosis, unspecified bone
M87311	Other secondary osteonecrosis, right shoulder
M87312	Other secondary osteonecrosis, left shoulder
M87319	Other secondary osteonecrosis, unspecified shoulder
M87321	Other secondary osteonecrosis, right humerus
M87322	Other secondary osteonecrosis, left humerus
M87329	Other secondary osteonecrosis, unspecified humerus
M87331	Other secondary osteonecrosis of right radius
M87332	Other secondary osteonecrosis of left radius

M87333	Other secondary osteonecrosis of unspecified radius
M87334	Other secondary osteonecrosis of right ulna
M87335	Other secondary osteonecrosis of left ulna
M87336	Other secondary osteonecrosis of unspecified ulna
M87337	Other secondary osteonecrosis of right carpus
M87338	Other secondary osteonecrosis of left carpus
M87339	Other secondary osteonecrosis of unspecified carpus
M87341	Other secondary osteonecrosis, right hand
M87342	Other secondary osteonecrosis, left hand
M87343	Other secondary osteonecrosis, unspecified hand
M87344	Other secondary osteonecrosis, right finger(s)
M87345	Other secondary osteonecrosis, left finger(s)
M87346	Other secondary osteonecrosis, unspecified finger(s)
M87350	Other secondary osteonecrosis, pelvis
M87351	Other secondary osteonecrosis, right femur
M87352	Other secondary osteonecrosis, left femur
M87353	Other secondary osteonecrosis, unspecified femur
M87361	Other secondary osteonecrosis, right tibia
M87362	Other secondary osteonecrosis, left tibia
M87363	Other secondary osteonecrosis, unspecified tibia
M87364	Other secondary osteonecrosis, right fibula
M87365	Other secondary osteonecrosis, left fibula
M87366	Other secondary osteonecrosis, unspecified fibula
M87371	Other secondary osteonecrosis, right ankle
M87372	Other secondary osteonecrosis, left ankle
M87373	Other secondary osteonecrosis, unspecified ankle
M87374	Other secondary osteonecrosis, right foot
M87375	Other secondary osteonecrosis, left foot
M87376	Other secondary osteonecrosis, unspecified foot
M87377	Other secondary osteonecrosis, right toe(s)
M87378	Other secondary osteonecrosis, left toe(s)
M87379	Other secondary osteonecrosis, unspecified toe(s)
M8738	Other secondary osteonecrosis, other site
M8739	Other secondary osteonecrosis, multiple sites
M8780	Other osteonecrosis, unspecified bone
M87811	Other osteonecrosis, right shoulder
M87812	Other osteonecrosis, left shoulder
M87819	Other osteonecrosis, unspecified shoulder
M87821	Other osteonecrosis, right humerus
M87822	Other osteonecrosis, left humerus
M87829	Other osteonecrosis, unspecified humerus

M87831	Other osteonecrosis of right radius
M87832	Other osteonecrosis of left radius
M87833	Other osteonecrosis of unspecified radius
M87834	Other osteonecrosis of right ulna
M87835	Other osteonecrosis of left ulna
M87836	Other osteonecrosis of unspecified ulna
M87837	Other osteonecrosis of right carpus
M87838	Other osteonecrosis of left carpus
M87839	Other osteonecrosis of unspecified carpus
M87841	Other osteonecrosis, right hand
M87842	Other osteonecrosis, left hand
M87843	Other osteonecrosis, unspecified hand
M87844	Other osteonecrosis, right finger(s)
M87845	Other osteonecrosis, left finger(s)
M87849	Other osteonecrosis, unspecified finger(s)
M87850	Other osteonecrosis, pelvis
M87851	Other osteonecrosis, right femur
M87852	Other osteonecrosis, left femur
M87859	Other osteonecrosis, unspecified femur
M87861	Other osteonecrosis, right tibia
M87862	Other osteonecrosis, left tibia
M87863	Other osteonecrosis, unspecified tibia
M87864	Other osteonecrosis, right fibula
M87865	Other osteonecrosis, left fibula
M87869	Other osteonecrosis, unspecified fibula
M87871	Other osteonecrosis, right ankle
M87872	Other osteonecrosis, left ankle
M87873	Other osteonecrosis, unspecified ankle
M87874	Other osteonecrosis, right foot
M87875	Other osteonecrosis, left foot
M87876	Other osteonecrosis, unspecified foot
M87877	Other osteonecrosis, right toe(s)
M87878	Other osteonecrosis, left toe(s)
M87879	Other osteonecrosis, unspecified toe(s)
M8788	Other osteonecrosis, other site
M8789	Other osteonecrosis, multiple sites
M879	Osteonecrosis, unspecified
I87011	Postthrombotic syndrome with ulcer of right lower extremity
I87012	Postthrombotic syndrome with ulcer of left lower extremity
I87013	Postthrombotic syndrome with ulcer of bilateral lower extremity
I87019	Postthrombotic syndrome with ulcer of unspecified lower extremity

187031	Postthrombotic syndrome with ulcer and inflammation of right lower extremity
187032	Postthrombotic syndrome with ulcer and inflammation of left lower extremity
187033	Postthrombotic syndrome with ulcer and inflammation of bilateral lower extremity
187039	Postthrombotic syndrome with ulcer and inflammation of unspecified lower extremity
187311	Chronic venous hypertension (idiopathic) with ulcer of right lower extremity
187312	Chronic venous hypertension (idiopathic) with ulcer of left lower extremity
187313	Chronic venous hypertension (idiopathic) with ulcer of bilateral lower extremity
187319	Chronic venous hypertension (idiopathic) with ulcer of unspecified lower extremity
187331	Chronic venous hypertension (idiopathic) with ulcer and inflammation of right lower extremity
187332	Chronic venous hypertension (idiopathic) with ulcer and inflammation of left lower extremity
187333	Chronic venous hypertension (idiopathic) with ulcer and inflammation of bilateral lower extremity
187339	Chronic venous hypertension (idiopathic) with ulcer and inflammation of unspecified lower extremity

A20: PULMONARY HYPERTENSION

ICD-10-CM Code	Descriptor
I270	Primary pulmonary hypertension
I272	Other secondary pulmonary hypertension
I2720	Pulmonary hypertension, unspecified
I2721	Secondary pulmonary arterial hypertension
I2722	Pulmonary hypertension due to left heart disease
I2723	Pulmonary hypertension due to lung diseases and hypoxia
I2724	Chronic thromboembolic pulmonary hypertension
I2729	Other secondary pulmonary hypertension

A21: RETINOPATHY/RETINAL DETACHMENT/VITREOUS HEMORRHAGE

ICD-10-CM Code	Descriptor
H3520	Other non-diabetic proliferative retinopathy, unspecified eye
H3521	Other non-diabetic proliferative retinopathy, right eye
H3522	Other non-diabetic proliferative retinopathy, left eye
H3523	Other non-diabetic proliferative retinopathy, bilateral
H3560	Retinal hemorrhage, unspecified eye
H3561	Retinal hemorrhage, right eye
H3562	Retinal hemorrhage, left eye
H3563	Retinal hemorrhage, bilateral
H3570	Unspecified separation of retinal layers
H35711	Central serous chorioretinopathy, right eye
H35712	Central serous chorioretinopathy, left eye

H35713	Central serous chorioretinopathy, bilateral
H35719	Central serous chorioretinopathy, unspecified eye
H35721	Serous detachment of retinal pigment epithelium, right eye
H35722	Serous detachment of retinal pigment epithelium, left eye
H35723	Serous detachment of retinal pigment epithelium, bilateral
H35729	Serous detachment of retinal pigment epithelium, unspecified eye
H35731	Hemorrhagic detachment of retinal pigment epithelium, right eye
H35732	Hemorrhagic detachment of retinal pigment epithelium, left eye
H35733	Hemorrhagic detachment of retinal pigment epithelium, bilateral
H35739	Hemorrhagic detachment of retinal pigment epithelium, unspecified eye
H3581	Retinal edema
H3582	Retinal ischemia
H3589	Other specified retinal disorders
H359	Unspecified retinal disorder
H36	Retinal disorders in diseases classified elsewhere
H33001	Unspecified retinal detachment with retinal break, right eye
H33002	Unspecified retinal detachment with retinal break, left eye
H33003	Unspecified retinal detachment with retinal break, bilateral
H33009	Unspecified retinal detachment with retinal break, unspecified eye
H33011	Retinal detachment with single break, right eye
H33012	Retinal detachment with single break, left eye
H33013	Retinal detachment with single break, bilateral
H33019	Retinal detachment with single break, unspecified eye
H33021	Retinal detachment with multiple breaks, right eye
H33022	Retinal detachment with multiple breaks, left eye
H33023	Retinal detachment with multiple breaks, bilateral
H33029	Retinal detachment with multiple breaks, unspecified eye
H33031	Retinal detachment with giant retinal tear, right eye
H33032	Retinal detachment with giant retinal tear, left eye
H33033	Retinal detachment with giant retinal tear, bilateral
H33039	Retinal detachment with giant retinal tear, unspecified eye
H33041	Retinal detachment with retinal dialysis, right eye
H33042	Retinal detachment with retinal dialysis, left eye
H33043	Retinal detachment with retinal dialysis, bilateral
H33049	Retinal detachment with retinal dialysis, unspecified eye
H33051	Total retinal detachment, right eye
H33052	Total retinal detachment, left eye
H33053	Total retinal detachment, bilateral
H33059	Total retinal detachment, unspecified eye
H4310	Vitreous hemorrhage, unspecified eye
H4311	Vitreous hemorrhage, right eye

H4312	Vitreous hemorrhage, left eye
H4313	Vitreous hemorrhage, bilateral

A22: SILENT CEREBRAL INFARCTION – RISK FACTOR

ICD-10-CM Code	Descriptor
G40301	Generalized idiopathic epilepsy and epileptic syndromes, not intractable, with status epilepticus
G40309	Generalized idiopathic epilepsy and epileptic syndromes, not intractable, without status epilepticus
G40311	Generalized idiopathic epilepsy and epileptic syndromes, intractable, with status epilepticus
G40319	Generalized idiopathic epilepsy and epileptic syndromes, intractable, without status epilepticus
G40401	Other generalized epilepsy and epileptic syndromes, not intractable, with status epilepticus
G40409	Other generalized epilepsy and epileptic syndromes, not intractable, without status epilepticus
G40411	Other generalized epilepsy and epileptic syndromes, intractable, with status epilepticus
G40419	Other generalized epilepsy and epileptic syndromes, intractable, without status epilepticus
G40501	Epileptic seizures related to external causes, not intractable, with status epilepticus
G40509	Epileptic seizures related to external causes, not intractable, without status epilepticus
G40801	Other epilepsy, not intractable, with status epilepticus
G40802	Other epilepsy, not intractable, without status epilepticus
G40803	Other epilepsy, intractable, with status epilepticus
G40804	Other epilepsy, intractable, without status epilepticus
G40813	Lennox-Gastaut syndrome, intractable, with status epilepticus
G40814	Lennox-Gastaut syndrome, intractable, without status epilepticus
G40821	Epileptic spasms, not intractable, with status epilepticus
G40822	Epileptic spasms, not intractable, without status epilepticus
G40823	Epileptic spasms, intractable, with status epilepticus
G40824	Epileptic spasms, intractable, without status epilepticus
G40901	Epilepsy, unspecified, not intractable, with status epilepticus
G40909	Epilepsy, unspecified, not intractable, without status epilepticus
G40911	Epilepsy, unspecified, intractable, with status epilepticus
G40919	Epilepsy, unspecified, intractable, without status epilepticus
G40A01	Absence epileptic syndrome, not intractable, with status epilepticus
G40A09	Absence epileptic syndrome, not intractable, without status epilepticus
G40A11	Absence epileptic syndrome, intractable, with status epilepticus
G40A19	Absence epileptic syndrome, intractable, without status epilepticus
G40B01	Juvenile myoclonic epilepsy, not intractable, with status epilepticus
G40B09	Juvenile myoclonic epilepsy, not intractable, without status epilepticus
G40B11	Juvenile myoclonic epilepsy, intractable, with status epilepticus
G40B19	Juvenile myoclonic epilepsy, intractable, without status epilepticus
G40001	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, not intractable, with status epilepticus

G40009	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, not intractable, without status epilepticus
G40011	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, intractable, with status epilepticus
G40019	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, intractable, without status epilepticus
G40101	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, not intractable, with status epilepticus
G40109	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, not intractable, without status epilepticus
G40111	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, intractable, with status epilepticus
G40119	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, intractable, without status epilepticus
G40201	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, not intractable, with status epilepticus
G40209	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, not intractable, without status epilepticus
G40211	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, intractable, with status epilepticus
G40219	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, intractable, without status epilepticus
G4089	Other seizures
D72828	Other elevated white blood cell count
D72829	Elevated white blood cell count, unspecified
R030	Elevated blood-pressure reading, without diagnosis of hypertension
I10	Essential (primary) hypertension
I119	Hypertensive heart disease without heart failure
I129	Hypertensive chronic kidney disease w stg 1-4/unsp chr kidney
I150	Renovascular hypertension
I151	Hypertension secondary to other renal disorders
I152	Hypertension secondary to endocrine disorders
I158	Other secondary hypertension
I159	Secondary hypertension, unspecified
I160	Hypertensive urgency
I161	Hypertensive emergency
I169	Hypertensive crisis, unspecified
I673	Progressive vascular leukoencephalopathy

Appendix B: Blood Transfusion and Iron Chelation Code Lists

B1: BLOOD TRANSFUSION, HCPCS

HCPCS		
36430	36455	36512

B2: BLOOD TRANSFUSION, REVENUE CODES

Revenue Code	Description
0380	Blood and Blood Products - General
0381	Blood and Blood Products - Packed red cells
0382	Blood and Blood Products - Whole blood and blood products
0390	Administration, Processing and Storage for Blood and Blood Components - General
0391	Administration, Processing and Storage for Blood and Blood Components - Administration (e.g., Transfusions)
0392	Administration, Processing and Storage for Blood and Blood Components - Processing and storage
0399	Administration, Processing and Storage for Blood and Blood Components - Other processing and storage

B3: GENERIC DRUG NAMES USED TO IDENTIFY IRON CHELATION DRUGS

Generic Drug Name		
Deferasirox	Deferiprone	Deferoxamine mesylate

Appendix C: SCD Supportive Drugs and Opioid Code Lists

C1: GENERIC DRUG NAMES USED TO IDENTIFY OTHER SUPPORTIVE DRUGS – FOLATE

Generic Drug Names		
B-Complex w/ Folic Acid	B-Complex w/Biotin & Folic Acid	B-Complex w/ C-Zn & Folic Acid
B-Complex w/ Lysine-Zn & Folic Acid	B-Complex w/ C-Biotin-Vit E & Folic Acid	B-Complex w/ C & Folic Acid
B-Complex w/ C-Biotin-E-Minerals & Folic Acid	Multiple Vitamins with Folic Acid	B-Complex w/ C-Biotin-D & Folic Acid
B-Complex w/ C-Biotin-Minerals & Folic Acid	Multiple Vit & Fluoride-Folic Acid	B-Complex w/ C-Biotin-D-Zinc & Folic Acid
Multiple Vitamins with Folic Acid	Multiple Vit w/ Min & Calcium-Folic Acid	Ca Carb-Folic Acid-Vit D-B6-B12-Boron-Mag
Magnesium-Calcium-Folic Acid	Choline-Inositol-Methionine-Folic Acid	DHA-EPA-Vit B6-B12-Folic Acid
Levomefolic Acid (5-MTHF)	Folic Acid-Pyridoxine-Cyanocobalamin	Folic Acid
Folic Acid-Vitamin C	Folic Acid-Cholecalciferol	Folic Acid-Vitamin B6-Vitamin B12
Folic Acid-Vit B6-Vit B12-Omega 3-Phytosterols	Folic Acid-Vit B2-Vit B6-Vit B12-Vit C-Cholin	Folic Acid-Cyanocobalamin-Vit B6-Vit D-Calcium-Aloe
Folic Acid-Vit B6-Vit B12-Omega 3-Biotin-Cr	Folic Acid-B6-B12-D-Omega 3-Phytosterols	Folic Ac-Vit B2-Vit B6-Vit B12-Vit D-Calc-Phosphorus

C2: GENERIC DRUG NAMES USED TO IDENTIFY OTHER SUPPORTIVE DRUGS – PENICILLIN

Generic Drug Names		
Penicillin G Benzathine	Penicillin G Procaine	Penicillin V Potassium
Amoxicillin (Trihydrate)	Penicillin G Benzathine & Procaine	

C3: GENERIC DRUG NAMES USED TO IDENTIFY OPIOIDS

Generic Drug Names	
Alfentanil	Codeine Sulfate
Fentanyl	Fentanyl Citrate
Fentanyl Citrate NaCl PF	Fentanyl Citrate PF
Fentanyl HCl Iontophoretic	Hydrocodone Bitartrate
Hydromorphone HCl	Levorphanol Tartrate
Hydromorphone HCl-Sodium Chloride	Meperidine HCl
Methadone HCl	Morphine Sulfate
Morphine-Naltrexone	Oxycodone
Oxycodone HCl	Oxymorphone HCl
Propoxyphene HCl	Remifentanyl HCl
Sufentanil Citrate	Tapentadol HCl
Tramadol HCl	Buprenorphine
Butorphanol Tartrate	Nalbuphine HCl
Pentazocine Lactate	Pentazocine w/ Naloxone
Oxycodone w/ Acetaminophen	Oxycodone w/ Aspirin
Oxycodone-Ibuprofen	Acetaminophen w/ Codeine
Butalbital-Aspirin-Caff w/ Codeine	Acetaminophen-Caffeine-Dihydrocodeine
Aspirin-Caffeine-Dihydrocodeine	Apomorphine hydrochloride
Fentanyl Cit-Bupivacaine-NaCl	Hydrocodone-Acetaminophen
Hydrocodone-Ibuprofen	Hydromorphone
Meperidine w/ Promethazine	Pentazocine-Acetaminophen
Tramadol-Acetaminophen	Buprenorphine Hydrochloride
Buprenorphine HCl-Naloxone HCl	Buprenorphine-Naloxone



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