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The following report(s) provides findings from an FDA-initiated query using Sentinel. While Sentinel queries may be undertaken to assess potential medical product safety risks, they may also be initiated for various other reasons. Some examples include determining a rate or count of an identified health outcome of interest, examining medical product use, exploring the feasibility of future, more detailed analyses within Sentinel, and seeking to better understand Sentinel capabilities.

Data obtained through Sentinel are intended to complement other types of evidence such as preclinical studies, clinical trials, postmarket studies, and adverse event reports, all of which are used by FDA to inform regulatory decisions regarding medical product safety. The information contained in this report is provided as part of FDA's commitment to place knowledge acquired from Sentinel in the public domain as soon as possible. Any public health actions taken by FDA regarding products involved in Sentinel queries will continue to be communicated through existing channels.

FDA wants to emphasize that the fact that FDA has initiated a query involving a medical product and is reporting findings related to that query does not mean that FDA is suggesting health care practitioners should change their prescribing practices for the medical product or that patients taking the medical product should stop using it. Patients who have questions about the use of an identified medical product should contact their health care practitioners.

The following report contains a description of the request, request specifications, and results from the modular program run(s).

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Overview for Request cder_ahr_wp007, Report 2 of 2

Request ID: cder_ahr_wp007

<u>Query Description</u>: This report contains baseline characteristics of members who had magnetic resonance imaging (MRI) procedures with Gadolinium-based contrast agents (GBCA). This is Report 2 of 2. Report 1 contains estimated numbers of individuals with MRI procedures. Exposed members were identified by a previous request (cder_ahr_wp003), which was distributed in June of 2016.

Sentinel Modular Program Tool Used: Cohort Identification and Descriptive Analysis (CIDA) tool, version 3.0.2.

<u>Data Source:</u> Data from January 1, 2008 to July 31, 2015 from the 13 Data Partners contributing to the Sentinel Distributed Database (SDD) were included in this report. Please see Appendix A for a list of dates of available data for each Data Partner. This request was distributed to Data Partners on November 23, 2016.

<u>Study Design:</u> This request was designed to evaluate the distribution of baseline characteristics for patients with an MRI. The number of qualifying patients with the exposure of interest were calculated overall and stratified by age group, sex, comorbidity score, and health service utilization intensity.

Exposure of Interest: The exposures of interest were MRI procedures with GBCA contrast and with or without GBCA contrast. MRIs for extremities, non-extremities, and head/neck were evaluated and were defined using Current Procedural Terminology, 4th Edition (CPT-4) procedure codes. Please refer to Appendix B for specific codes. MRIs were limited to those that occurred in the outpatient setting.

<u>Cohort Eligibility Criteria:</u> Individuals were required to be continuously enrolled in health plans with both medical and drug coverage for at least 183 days before their index date, during which gaps in coverage of up to 45 days were allowed. The following age groups were included in the cohort: 2-17, 18-44, 45-64, and 65+ years.

Cohort Exclusion Criteria: Individuals were required to have no evidence of any MRI "with contrast" or "with and without contrast" (including a head or neck MRI) in any care setting in the 6 months (183 days) prior to the index date. Patients who had a head or neck MRI on the same day as a qualifying exposure were also excluded. Additionally, patients who had at least one of the following conditions in the 183 days prior to the exposure of interest were excluded: MI, stroke, brain tumor, Alzheimer's, autism spectrum disorder, illegal or legal drug overdose, head injury, or kidney disease. Exclusions could occur in any care setting and were defined using International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) diagnosis and procedure codes. Please refer to Appendix C for specific codes.

Baseline Characteristics: The following characteristics were assessed during the baseline period: age, sex, Charlson/Elixhauser comorbidity score¹, and health service utilization, and any of the following conditions or medications: (1) advanced liver disease (2) allergy (3) anti-arrhythmics (4) anti-epileptic medications (5) antihypertensive medications (6) chronic heart failure (7) coronary artery bypass surgery (8) diabetes mellitus (9) diuretic medication (10) epilepsy (11) hospitalized intracranial bleed (12) hyperlipidemia (13) hypertension (14) major surgery (15) metastatic cancer (16) oral antidiabetics (17) peripheral vascular disease (18) proton pump inhibitors (19) SSRI or SNRI (20) statins (21) trauma with likely immobilization. Occurrence of these covariates was evaluated in the 6 months (183 days) prior to the MRI exposure. Please see Appendices D and E for specific codes.

Please see Appendix F for specifications of parameters used in the analyses for this request.

<u>Limitations:</u> Algorithms to define exposures and covariates are imperfect and, therefore, may be misclassified. Therefore, data should be interpreted with this limitation in mind.

Notes: Please contact the Sentinel Operations Center Query Fulfillment Team (qf@sentinelsystem.org) for questions and to provide comments/suggestions for future enhancements to this document.

¹Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759



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Glossary of Terms for Analyses Using Cohort Identification and Descriptive Analysis (CIDA) Tool*

Amount Supplied - number of units (pills, tablets, vials) dispensed. Net amount per NDC per dispensing.

Blackout Period - number of days at the beginning of a treatment episode that events are to be ignored. If an event occurs during the blackout period, the episode is excluded.

Care Setting - type of medical encounter or facility where the exposure, event, or condition code was recorded. Possible care settings include: Inpatient Hospital Stay (IP), Non-Acute Institutional Stay (IS), Emergency Department (ED), Ambulatory Visit (AV), and Other Ambulatory Visit (OA). For laboratory results, possible care settings include: Emergency Department (E), Home (H), Inpatient (I), Outpatient (O), or Unknown or Missing (U). The Care Setting, along with the Principal Diagnosis Indicator (PDX), forms the Care Setting/PDX parameter.

Ambulatory Visit (AV) - includes visits at outpatient clinics, same-day surgeries, urgent care visits, and other same-day ambulatory hospital encounters, but excludes emergency department encounters.

Emergency Department (ED) - includes ED encounters that become inpatient stays (in which case inpatient stays would be a separate encounter). Excludes urgent care visits.

Inpatient Hospital Stay (IP) - includes all inpatient stays, same-day hospital discharges, hospital transfers, and acute hospital care where the discharge is after the admission date.

Non-Acute Institutional Stay (IS) - includes hospice, skilled nursing facility (SNF), rehab center, nursing home, residential, overnight non-hospital dialysis and other non-hospital stays.

Other Ambulatory Visit (OA) - includes other non overnight AV encounters such as hospice visits, home health visits, skilled nursing facility visits, other non-hospital visits, as well as telemedicine, telephone and email consultations.

Charlson/Elixhauser Combined Comorbidity Score - calculated based on comorbidities observed during a requester-defined window around the exposure episode start date (e.g., in the 183 days prior to index).

Cohort Definition (drug/exposure) - indicates how the cohort will be defined: 01: Cohort includes only the first valid treatment episode during the query period; 02: Cohort includes all valid treatment episodes during the query period; 03: Cohort includes all valid treatment episodes during the query period until an event occurs.

Computed Start Marketing Date - represents the first observed dispensing date among all valid users within a GROUP (scenario) within each Data Partner site.

Days Supplied - number of days supplied for all dispensings in qualifying treatment episodes.

Eligible Members - number of members eligible for an incident treatment episode (defined by the drug/exposure and event washout periods) with drug and medical coverage during the query period.

Enrollment Gap - number of days allowed between two consecutive enrollment periods without breaking a "continuously enrolled" sequence.

Episodes - treatment episodes; length of episode is determined by days supplied in one dispensing or consecutive dispensings bridged by the episode gap.

Episode Gap - number of days allowed between two (or more) consecutive exposures (dispensings/procedures) to be considered the same treatment episode.

Event Deduplication - specifies how events are counted by the Modular Program (MP) algorithm: 0: Counts all occurrences of a health outcome of interest (HOI) during an exposure episode; 1: de-duplicates occurrences of the same HOI code and code type on the same day; 2: de-duplicates occurrences of the same HOI group on the same day (e.g., de-duplicates at the group level).

Exposure Episode Length - number of days after exposure initiation that is considered "exposed time."

Exposure Extension Period - number of days post treatment period in which the outcomes/events are counted for a treatment episode. Extensions are added after any episode gaps have been bridged.

Lookback Period - number of days wherein a member is required to have evidence of pre-existing condition (diagnosis/procedure/drug dispensing).



Maximum Episode Duration - truncates exposure episodes after a requester-specified number of exposed days. Applied after any gaps are bridged and extension days added to the length of the exposure episode.

Member-Years - sum of all days of enrollment with medical and drug coverage in the query period preceded by an exposure washout period all divided by 365.25.

Minimum Days Supplied - specifies a minimum number of days in length of the days supplied for the episode to be considered.

Minimum Episode Duration - specifies a minimum number of days in length of the episode for it to be considered. Applied after any gaps are bridged and extension days added to the length of the exposure episode.

Monitoring Period - used to define time periods of interest for both sequential analysis and simple cohort characterization requests.

Principal Diagnosis (PDX) - diagnosis or condition established to be chiefly responsible for admission of the patient to the hospital. 'P' = principal diagnosis, 'S' = secondary diagnosis, 'X' = unspecified diagnosis, '.' = blank. Along with the Care Setting values, forms the Caresetting/PDX parameter.

Query Period - period in which the modular program looks for exposures and outcomes of interest.

Switch Evaluation Step Value - value used to differentiate evaluation step. Each switch pattern can support up to 2 evaluation steps (0 = switch pattern evaluation start; 1 = first evaluation; 2 = second evaluation).

Switch Gap Inclusion Indicator - indicator for whether gaps in treatment episodes that are included in a switch episode will be counted as part of the switch episode duration.

Switch Pattern Cohort Inclusion Date - indicates which date to use for inclusion into the switch pattern cohort of interest as well as optionally as the index date of the treatment episode initiating the switch pattern. Valid options are the product approval date, product marketing date, other requester defined date, or computed start marketing date.

Switch Pattern Cohort Inclusion Strategy - indicates how the switch pattern cohort inclusion date will be used: 01: used only as a switch cohort entry date. First treatment episode dispensing date is used as index for computing time to first switch; 02: used as switch cohort entry date and as initial switch step index date for computing time to first switch.

Treatment Episode Truncation Indicator - indicates whether the exposure episode will be truncated at the occurrence of a requester-specified code.

Washout Period (drug/exposure) - number of days a user is required to have no evidence of prior exposure (drug dispensing/procedure) and continuous drug and medical coverage prior to an incident treatment episode.

Washout Period (event/outcome) - number of days a user is required to have no evidence of a prior event (procedure/diagnosis) and continuous drug and medical coverage prior to an incident treatment episode.

Years at Risk - number of days supplied plus any episode gaps and exposure extension periods all divided by 365.25.

^{*}all terms may not be used in this report



Table 1. Baseline Characteristics of Patients with a Magnetic Resonance Imaging (MRI) Procedure with Gadolinium-Based Contrast Agents (GBCA) from January 1, 2008 to July 31, 2015 in the Sentinel Distributed Database

Database				
		GBCA for MRI		
Characteristic	Number	Percent		
Episodes (N)	1,520,644	100.0%		
Unique Patients (N)	1,520,644	100.0%		
Demographics	Mean	Standard Deviation		
Mean Age (years)	49.8	16.2		
Age (years)	Number	Percent		
2 -17	77,356	5.1%		
18-44	468,384	30.8%		
45-64	699,739	46.0%		
65+	275,165	18.1%		
Sex				
Female	836,680	55.0%		
Male	683,883	45.0%		
Unknown	80	0.0%		
Recorded History of:	Mean	Standard Deviation		
¹ Charlson/Elixhauser combined comorbidity score	0.5	1.4		
	Number	Percent		
Advanced liver disease	10,834	0.7%		
Allergy	210,754	13.9%		
Chronic heart failure	36,615	2.4%		
Coronary artery bypass surgery	10,752	0.7%		
Diabetes mellitus	182,429	12.0%		
Epilepsy diagnosis	7,873	0.5%		
Hospitalized intracranial bleed	165	0.0%		
Hyperlipidemia	206,908	13.6%		
Hypertension	460,575	30.3%		
Major surgery	41,438	2.7%		
Metastatic cancer	40,410	2.7%		
Peripheral vascular disease	61,782	4.1%		
Trauma with likely immobilization	44,229	2.9%		
History of Use:	Number	Percent		
Anti-arrhythmics	32,436	2.1%		
Anti-epileptic medications	332,432	21.9%		
Anti-hypertensives	411,237	27.0%		
Diuretic medication	155,325	10.2%		
Oral Antidiabetics	112,560	7.4%		
Proton pump inhibitors	235,625	15.5%		
SSRI or SNRI	252,879	16.6%		
Statins	298,682	19.6%		



Table 1. Baseline Characteristics of Patients with a Magnetic Resonance Imaging (MRI) Procedure with Gadolinium-Based Contrast Agents (GBCA) from January 1, 2008 to July 31, 2015 in the Sentinel Distributed Database

	GBCA for MRI		
Health Service Utilization Intensity:	Mean	Standard Deviation	
Number of generic drugs	9.9	9	
Number of unique drug classes	0.3	0.8	
Number of filled prescriptions	12.5	13.6	
Number of inpatient hospital encounters (IP)	5.5	4.7	
Number of non-acute institutional encounters (IS)	0.1	0.4	
Number of emergency room encounters (ED)	0	0.3	
Number of ambulatory encounters (AV)	2.3	4.4	
Number of other ambulatory encounters (OA)	5.2	4.4	

¹Charlson/Elixhauser combined comorbidity score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date (index date).



Appendix A. Latest Date of Available Data for Each Data Partner up to Data Partner Data Completeness Date (July 31, 2015)

DP ID	Start Date	End Date
DP0001	01/01/08	4/30/2015
DP0002	01/01/08	7/31/2015
DP0003	01/01/08	7/31/2015
DP0004	01/01/08	4/30/2015
DP0005	01/01/08	7/31/2015
DP0006	01/01/08	7/31/2015
DP0007	01/01/08	7/31/2015
DP0008	01/01/08	7/31/2015
DP0009	01/01/08	7/31/2015
DP0010	01/01/08	7/31/2015
DP0011	01/01/08	7/31/2015
DP0012	01/01/08	7/31/2015
DP0013	01/01/08	7/31/2015



Appendix B. List of Current Procedural Terminology, Fourth Edition (CPT-4) Procedure Codes used to Define Magnetic Resonance Imaging (MRI) in this Request

Code	Code Type	Description					
	MRI Location: Extremity						
73222	CPT-4	MRI Upper extremity joint with contrast					
73219	CPT-4	MRI Upper extremity other than joint w contrast					
73722	CPT-4	MRI Lower extremity joint with contrast					
73719	CPT-4	MRI Lower extremity joint with contrast					
73223	CPT-4	MRI Upper extremity joint with & without contrast					
73220	CPT-4	MRI Upper extremity other than joint with & without contrast					
73723	CPT-4	MRI Lower extremity joint with & without contrast					
73720	CPT-4	MRI Lower extremity other than joint with & without contrast					
		MRI Location: Head and Neck					
70552	CPT-4	MRI Head with contrast					
70542	CPT-4	MRI Face, orbit, neck with contrast					
70553	CPT-4	MRI Head with & without contrast					
70543	CPT-4	MRI Face, orbit, neck with & without contrast					
MRI Location: Non-Extremity							
72142	CPT-4	MRI Cervical spine with contrast					
71551	CPT-4	MRI Chest w contrast					
72147	CPT-4	MRI Thoracic spine with contrast					
74182	CPT-4	MRI Abdomen with contrast					
72149	CPT-4	MRI Lumbar spine with contrast					
72196	CPT-4	MRI Pelvis with contrast					
72156	CPT-4	MRI C Spine with & without contrast					
71552	CPT-4	MRI Chest w & without contrast					
72157	CPT-4	MRI T Spine with & without contrast					
74183	CPT-4	MRI Abdomen with & without contrast					
72158	CPT-4	MRI L Spine with & without contrast					
72197	CPT-4	MRI Pelvis with & without contrast					



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code				
Code	Code Type	Category	Description			
	Alzheimer's disease					
331.0	ICD-9-CM	Diagnosis	Alzheimer's disease			
			Autism Spectrum			
299	ICD-9-CM	Diagnosis	Pervasive developmental disorders			
299.0	ICD-9-CM	Diagnosis	Autistic disorder			
299.00	ICD-9-CM	Diagnosis	Autistic disorder, current or active state			
299.01	ICD-9-CM	Diagnosis	Autistic disorder, residual state			
299.1	ICD-9-CM	Diagnosis	Childhood disintegrative disorder			
299.10	ICD-9-CM	Diagnosis	Childhood disintegrative disorder, current or active state			
299.11	ICD-9-CM	Diagnosis	Childhood disintegrative disorder, residual state			
299.8	ICD-9-CM	Diagnosis	Other specified pervasive developmental disorders			
299.80	ICD-9-CM	Diagnosis	Other specified pervasive developmental disorders, current or active state			
299.81	ICD-9-CM	Diagnosis	Other specified pervasive developmental disorders, residual state			
299.9	ICD-9-CM	Diagnosis	Unspecified pervasive developmental disorder			
299.90	ICD-9-CM	Diagnosis	Unspecified pervasive developmental disorder, current or active state			
299.91	ICD-9-CM	Diagnosis	Unspecified pervasive developmental disorder, residual state			
			Brain Tumor			
191	ICD-9-CM	Diagnosis	Malignant neoplasm of brain			
191.0	ICD-9-CM	Diagnosis	Malignant neoplasm of cerebrum, except lobes and ventricles			
191.1	ICD-9-CM	Diagnosis	Malignant neoplasm of frontal lobe of brain			
191.2	ICD-9-CM	Diagnosis	Malignant neoplasm of temporal lobe of brain			
191.3	ICD-9-CM	Diagnosis	Malignant neoplasm of parietal lobe of brain			
191.4	ICD-9-CM	Diagnosis	Malignant neoplasm of occipital lobe of brain			
191.5	ICD-9-CM	Diagnosis	Malignant neoplasm of ventricles of brain			
191.6	ICD-9-CM	Diagnosis	Malignant neoplasm of cerebellum NOS			
191.7	ICD-9-CM	Diagnosis	Malignant neoplasm of brain stem			
191.8	ICD-9-CM	Diagnosis	Malignant neoplasm of other parts of brain			
191.9	ICD-9-CM	Diagnosis	Malignant neoplasm of brain, unspecified site			
239.6	ICD-9-CM	Diagnosis	Neoplasm of unspecified nature of brain			



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

Code Code Type Category Description Drug Overdose 960 ICD-9-CM Diagnosis Poisoning by antibiotics	
-	
960 ICD-9-CM Diagnosis Poisoning by antibiotics	
960.0 ICD-9-CM Diagnosis Poisoning by penicillins	
960.1 ICD-9-CM Diagnosis Poisoning by antifungal antibiotics	
960.2 ICD-9-CM Diagnosis Poisoning by chloramphenicol group	
960.3 ICD-9-CM Diagnosis Poisoning by erythromycin and other macrolides	
960.4 ICD-9-CM Diagnosis Poisoning by tetracycline group	
960.5 ICD-9-CM Diagnosis Poisoning of cephalosporin group	
960.6 ICD-9-CM Diagnosis Poisoning of antimycobacterial antibiotics	
960.7 ICD-9-CM Diagnosis Poisoning by antineoplastic antibiotics	
960.8 ICD-9-CM Diagnosis Poisoning by other specified antibiotics	
960.9 ICD-9-CM Diagnosis Poisoning by unspecified antibiotic	
961 ICD-9-CM Diagnosis Poisoning by other anti-infectives	
961.0 ICD-9-CM Diagnosis Poisoning by sulfonamides	
961.1 ICD-9-CM Diagnosis Poisoning by arsenical anti-infectives	
961.2 ICD-9-CM Diagnosis Poisoning by heavy metal anti-infectives	
961.3 ICD-9-CM Diagnosis Poisoning by quinoline and hydroxyquinoline derivatives	
961.4 ICD-9-CM Diagnosis Poisoning by antimalarials and drugs acting on other blood protozoa	
961.5 ICD-9-CM Diagnosis Poisoning by other antiprotozoal drugs	
961.6 ICD-9-CM Diagnosis Poisoning by anthelmintics	
961.7 ICD-9-CM Diagnosis Poisoning by antiviral drugs	
961.8 ICD-9-CM Diagnosis Poisoning by other antimycobacterial drugs	
961.9 ICD-9-CM Diagnosis Poisoning by other and unspecified anti-infectives	
962 ICD-9-CM Diagnosis Poisoning by hormones and synthetic substitutes	
962.0 ICD-9-CM Diagnosis Poisoning by adrenal cortical steroids	
962.1 ICD-9-CM Diagnosis Poisoning by androgens and anabolic congeners	
962.2 ICD-9-CM Diagnosis Poisoning by ovarian hormones and synthetic substitutes	
962.3 ICD-9-CM Diagnosis Poisoning by insulins and antidiabetic agents	
962.4 ICD-9-CM Diagnosis Poisoning by anterior pituitary hormones	
962.5 ICD-9-CM Diagnosis Poisoning by posterior pituitary hormones	
962.6 ICD-9-CM Diagnosis Poisoning by parathyroid and parathyroid derivatives	
962.7 ICD-9-CM Diagnosis Poisoning by thyroid and thyroid derivatives	
962.8 ICD-9-CM Diagnosis Poisoning by antithyroid agents	
962.9 ICD-9-CM Diagnosis Poisoning by other and unspecified hormones and synthetic substitutes	
963 ICD-9-CM Diagnosis Poisoning by primarily systemic agents	
963.0 ICD-9-CM Diagnosis Poisoning by antiallergic and antiemetic drugs	
963.1 ICD-9-CM Diagnosis Poisoning by antineoplastic and immunosuppressive drugs	
963.2 ICD-9-CM Diagnosis Poisoning by acidifying agents	
963.3 ICD-9-CM Diagnosis Poisoning by alkalizing agents	
963.4 ICD-9-CM Diagnosis Poisoning by enzymes, not elsewhere classified	
963.5 ICD-9-CM Diagnosis Poisoning by vitamins, not elsewhere classified	
963.8 ICD-9-CM Diagnosis Poisoning by other specified systemic agents	
963.9 ICD-9-CM Diagnosis Poisoning by unspecified systemic agent	



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
964	ICD-9-CM	Diagnosis	Poisoning by agents primarily affecting blood constituents
964.0	ICD-9-CM	Diagnosis	Poisoning by iron and its compounds
964.1	ICD-9-CM	Diagnosis	Poisoning by liver preparations and other antianemic agents
964.2	ICD-9-CM	Diagnosis	Poisoning by anticoagulants
964.3	ICD-9-CM	Diagnosis	Poisoning by vitamin K (phytonadione)
964.4	ICD-9-CM	Diagnosis	Poisoning by fibrinolysis-affecting drugs
964.5	ICD-9-CM	Diagnosis	Poisoning by anticoagulant antagonists and other coagulants
964.6	ICD-9-CM	Diagnosis	Poisoning by gamma globulin
964.7	ICD-9-CM	Diagnosis	Poisoning by natural blood and blood products
964.8	ICD-9-CM	Diagnosis	Poisoning by other specified agents affecting blood constituents
964.9	ICD-9-CM	Diagnosis	Poisoning by unspecified agent affecting blood constituents
965	ICD-9-CM	Diagnosis	Poisoning by analgesics, antipyretics, and antirheumatics
965.0	ICD-9-CM	Diagnosis	Poisoning by opiates and related narcotics
965.00	ICD-9-CM	Diagnosis	Poisoning by opium (alkaloids), unspecified
965.01	ICD-9-CM	Diagnosis	Poisoning by heroin
965.02	ICD-9-CM	Diagnosis	Poisoning by methadone
965.09	ICD-9-CM	Diagnosis	Poisoning by opiates and related narcotics, other
965.1	ICD-9-CM	Diagnosis	Poisoning by salicylates
965.4	ICD-9-CM	Diagnosis	Poisoning by aromatic analgesics, not elsewhere classified
965.5	ICD-9-CM	Diagnosis	Poisoning by pyrazole derivatives
965.6	ICD-9-CM	Diagnosis	Poisoning by antirheumatics (antiphlogistics)
965.61	ICD-9-CM	Diagnosis	Poisoning by propionic acid derivatives
965.69	ICD-9-CM	Diagnosis	Poisoning by other antirheumatics
965.7	ICD-9-CM	Diagnosis	Poisoning by other non-narcotic analgesics
965.8	ICD-9-CM	Diagnosis	Poisoning by other specified analgesics and antipyretics
965.9	ICD-9-CM	Diagnosis	Poisoning by unspecified analgesic and antipyretic
966	ICD-9-CM	Diagnosis	Poisoning by anticonvulsants and anti-Parkinsonism drugs
966.0	ICD-9-CM	Diagnosis	Poisoning by oxazolidine derivatives
966.1	ICD-9-CM	Diagnosis	Poisoning by hydantoin derivatives
966.2	ICD-9-CM	Diagnosis	Poisoning by succinimides
966.3	ICD-9-CM	Diagnosis	Poisoning by other and unspecified anticonvulsants
966.4	ICD-9-CM	Diagnosis	Poisoning by anti-Parkinsonism drugs
967	ICD-9-CM	Diagnosis	Poisoning by sedatives and hypnotics
967.0	ICD-9-CM	Diagnosis	Poisoning by barbiturates
967.1	ICD-9-CM	Diagnosis	Poisoning by chloral hydrate group
967.2	ICD-9-CM	Diagnosis	Poisoning by paraldehyde
967.3	ICD-9-CM	Diagnosis	Poisoning by bromine compounds
967.4	ICD-9-CM	Diagnosis	Poisoning by methaqualone compounds
967.5	ICD-9-CM	Diagnosis	Poisoning by glutethimide group
967.6	ICD-9-CM	Diagnosis	Poisoning by mixed sedatives, not elsewhere classified
967.8	ICD-9-CM	Diagnosis	Poisoning by other sedatives and hypnotics
967.9	ICD-9-CM	Diagnosis	Poisoning by unspecified sedative or hypnotic
968	ICD-9-CM	Diagnosis	Poisoning by other central nervous system depressants and anesthetics



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
968.0	ICD-9-CM	Diagnosis	Poisoning by central nervous system muscle-tone depressants
968.1	ICD-9-CM	Diagnosis	Poisoning by halothane
968.2	ICD-9-CM	Diagnosis	Poisoning by other gaseous anesthetics
968.3	ICD-9-CM	Diagnosis	Poisoning by intravenous anesthetics
968.4	ICD-9-CM	Diagnosis	Poisoning by other and unspecified general anesthetics
968.5	ICD-9-CM	Diagnosis	Poisoning by other central nervous system depressants and anesthetics, Surface (topical) and infiltration anesthetics
68.6	ICD-9-CM	Diagnosis	Poisoning by peripheral nerve- and plexus-blocking anesthetics
68.7	ICD-9-CM	Diagnosis	Poisoning by spinal anesthetics
968.9	ICD-9-CM	Diagnosis	Poisoning by other and unspecified local anesthetics
969	ICD-9-CM	Diagnosis	Poisoning by psychotropic agents
69.0	ICD-9-CM	Diagnosis	Poisoning by antidepressants
969.00	ICD-9-CM	Diagnosis	Poisoning by antidepressant, unspecified
969.01	ICD-9-CM	Diagnosis	Poisoning by monoamine oxidase inhibitors
969.02	ICD-9-CM	Diagnosis	Poisoning by selective serotonin and norepinephrine reuptake inhibitors
969.03	ICD-9-CM	Diagnosis	Poisoning by selective serotonin reuptake inhibitors
969.04	ICD-9-CM	Diagnosis	Poisoning by tetracyclic antidepressants
69.05	ICD-9-CM	Diagnosis	Poisoning by tricyclic antidepressants
69.09	ICD-9-CM	Diagnosis	Poisoning by other antidepressants
69.1	ICD-9-CM	Diagnosis	Poisoning by phenothiazine-based tranquilizers
69.2	ICD-9-CM	Diagnosis	Poisoning by butyrophenone-based tranquilizers
69.3	ICD-9-CM	Diagnosis	Poisoning by other antipsychotics, neuroleptics, and major tranquilizers
69.4	ICD-9-CM	Diagnosis	Poisoning by benzodiazepine-based tranquilizers
69.5	ICD-9-CM	Diagnosis	Poisoning by other tranquilizers
969.6	ICD-9-CM	Diagnosis	Poisoning by psychodysleptics (hallucinogens)
969.7	ICD-9-CM	Diagnosis	Poisoning by psychostimulants
69.70	ICD-9-CM	Diagnosis	Poisoning by psychostimulant, unspecified
969.71	ICD-9-CM	Diagnosis	Poisoning by caffeine
969.72	ICD-9-CM	Diagnosis	Poisoning by amphetamines
969.73	ICD-9-CM	Diagnosis	Poisoning by methylphenidate
69.79	ICD-9-CM	Diagnosis	Poisoning by other psychostimulants
969.8	ICD-9-CM	Diagnosis	Poisoning by other specified psychotropic agents
969.9	ICD-9-CM	Diagnosis	Poisoning by unspecified psychotropic agent
970	ICD-9-CM	Diagnosis	Poisoning by central nervous system stimulants
70.0	ICD-9-CM	Diagnosis	Poisoning by analeptics
70.1	ICD-9-CM	Diagnosis	Poisoning by opiate antagonists
70.8	ICD-9-CM	Diagnosis	Poisoning by other specified central nervous system stimulants
70.81	ICD-9-CM	Diagnosis	Poisoning by cocaine
970.89	ICD-9-CM	Diagnosis	Poisoning by other central nervous system stimulants
970.9	ICD-9-CM	Diagnosis	Poisoning by unspecified central nervous system stimulant
971	ICD-9-CM	Diagnosis	Poisoning by drugs primarily affecting the autonomic nervous system
971.0	ICD-9-CM	Diagnosis	Poisoning by parasympathomimetics (cholinergics)



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
971.1	ICD-9-CM	Diagnosis	Poisoning by parasympatholytics (anticholinergics and antimuscarinics) and spasmolytics
971.2	ICD-9-CM	Diagnosis	Poisoning by sympathomimetics (adrenergics)
971.3	ICD-9-CM	Diagnosis	Poisoning by sympatholytics (antiadrenergics)
971.9	ICD-9-CM	Diagnosis	Poisoning by unspecified drug primarily affecting autonomic nervous system
972	ICD-9-CM	Diagnosis	Poisoning by agents primarily affecting the cardiovascular system
972.0	ICD-9-CM	Diagnosis	Poisoning by cardiac rhythm regulators
972.1	ICD-9-CM	Diagnosis	Poisoning by cardiotonic glycosides and drugs of similar action
972.2	ICD-9-CM	Diagnosis	Poisoning by antilipemic and antiarteriosclerotic drugs
972.3	ICD-9-CM	Diagnosis	Poisoning by ganglion-blocking agents
972.4	ICD-9-CM	Diagnosis	Poisoning by coronary vasodilators
972.5	ICD-9-CM	Diagnosis	Poisoning by other vasodilators
972.6	ICD-9-CM	Diagnosis	Poisoning by other antihypertensive agents
972.7	ICD-9-CM	Diagnosis	Poisoning by antivaricose drugs, including sclerosing agents
972.8	ICD-9-CM	Diagnosis	Poisoning by capillary-active drugs
972.9	ICD-9-CM	Diagnosis	Poisoning by other and unspecified agents primarily affecting the cardiovascular system
973	ICD-9-CM	Diagnosis	Poisoning by agents primarily affecting the gastrointestinal system
973.0	ICD-9-CM	Diagnosis	Poisoning by antacids and antigastric secretion drugs
973.1	ICD-9-CM	Diagnosis	Poisoning by irritant cathartics
973.2	ICD-9-CM	Diagnosis	Poisoning by emollient cathartics
973.3	ICD-9-CM	Diagnosis	Poisoning by other cathartics, including intestinal atonia drugs
973.4	ICD-9-CM	Diagnosis	Poisoning by digestants
973.5	ICD-9-CM	Diagnosis	Poisoning by antidiarrheal drugs
973.6	ICD-9-CM	Diagnosis	Poisoning by emetics
973.8	ICD-9-CM	Diagnosis	Poisoning by other specified agents primarily affecting the gastrointestinal system
973.9	ICD-9-CM	Diagnosis	Poisoning by unspecified agent primarily affecting the gastrointestinal system
974	ICD-9-CM	Diagnosis	Poisoning by water, mineral, and uric acid metabolism drugs
974.0	ICD-9-CM	Diagnosis	Poisoning by mercurial diuretics
974.1	ICD-9-CM	Diagnosis	Poisoning by purine derivative diuretics
974.2	ICD-9-CM	Diagnosis	Poisoning by carbonic acid anhydrase inhibitors
974.3	ICD-9-CM	Diagnosis	Poisoning by saluretics
974.4	ICD-9-CM	Diagnosis	Poisoning by other diuretics
974.5	ICD-9-CM	Diagnosis	Poisoning by electrolytic, caloric, and water-balance agents
974.6	ICD-9-CM	Diagnosis	Poisoning by other mineral salts, not elsewhere classified
974.7	ICD-9-CM	Diagnosis	Poisoning by uric acid metabolism drugs
975	ICD-9-CM	Diagnosis	Poisoning by agents primarily acting on the smooth and skeletal muscles and respiratory system
975.0	ICD-9-CM	Diagnosis	Poisoning by oxytocic agents
975.1	ICD-9-CM	Diagnosis	Poisoning by smooth muscle relaxants



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
975.2	ICD-9-CM	Diagnosis	Poisoning by skeletal muscle relaxants
975.3	ICD-9-CM	Diagnosis	Poisoning by other and unspecified drugs acting on muscles
975.4	ICD-9-CM	Diagnosis	Poisoning by antitussives
975.5	ICD-9-CM	Diagnosis	Poisoning by expectorants
975.6	ICD-9-CM	Diagnosis	Poisoning by anti-common cold drugs
975.7	ICD-9-CM	Diagnosis	Poisoning by antiasthmatics
975.8	ICD-9-CM	Diagnosis	Poisoning by other and unspecified respiratory drugs
976	ICD-9-CM	Diagnosis	Poisoning by agents primarily affecting skin and mucous membrane,
			ophthalmological, otorhinolaryngological, and dental drugs
976.0	ICD-9-CM	Diagnosis	Poisoning by local anti-infectives and anti-inflammatory drugs
976.1	ICD-9-CM	Diagnosis	Poisoning by antipruritics
976.2	ICD-9-CM	Diagnosis	Poisoning by local astringents and local detergents
976.3	ICD-9-CM	Diagnosis	Poisoning by emollients, demulcents, and protectants
976.4	ICD-9-CM	Diagnosis	Poisoning by keratolytics, keratoplastics, other hair treatment drugs and
			preparations
976.5	ICD-9-CM	Diagnosis	Poisoning by eye anti-infectives and other eye drugs
976.6	ICD-9-CM	Diagnosis	Poisoning by anti-infectives and other drugs and preparations for ear, nose, and throat
976.7	ICD-9-CM	Diagnosis	Poisoning by dental drugs topically applied
976.8	ICD-9-CM	Diagnosis	Poisoning by other agents primarily affecting skin and mucous membrane
976.9	ICD-9-CM	Diagnosis	Poisoning by unspecified agent primarily affecting skin and mucous membrane
977	ICD-9-CM	Diagnosis	Poisoning by other and unspecified drugs and medicinal substances
977.0	ICD-9-CM	Diagnosis	Poisoning by dietetics
977.1	ICD-9-CM	Diagnosis	Poisoning by lipotropic drugs
977.2	ICD-9-CM	Diagnosis	Poisoning by antidotes and chelating agents, not elsewhere classified
977.3	ICD-9-CM	Diagnosis	Poisoning by alcohol deterrents
977.4	ICD-9-CM	Diagnosis	Poisoning by pharmaceutical excipients
977.8	ICD-9-CM	Diagnosis	Poisoning by other specified drugs and medicinal substances
977.9	ICD-9-CM	Diagnosis	Poisoning by unspecified drug or medicinal substance
978	ICD-9-CM	Diagnosis	Poisoning by bacterial vaccines
978.0	ICD-9-CM	Diagnosis	Poisoning by BCG vaccine
978.1	ICD-9-CM	Diagnosis	Poisoning by typhoid and paratyphoid vaccine
978.2	ICD-9-CM	Diagnosis	Poisoning by cholera vaccine
978.3	ICD-9-CM	Diagnosis	Poisoning by plague vaccine
978.4	ICD-9-CM	Diagnosis	Poisoning by tetanus vaccine
978.5	ICD-9-CM	Diagnosis	Poisoning by diphtheria vaccine
978.6	ICD-9-CM	Diagnosis	Poisoning by pertussis vaccine, including combinations with pertussis component
978.8	ICD-9-CM	Diagnosis	Poisoning by other and unspecified bacterial vaccines
978.9	ICD-9-CM	Diagnosis	Poisoning by mixed bacterial vaccines, except combinations with pertussis component
979	ICD-9-CM	Diagnosis	Poisoning by other vaccines and biological substances



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
979.0	ICD-9-CM	Diagnosis	Poisoning by smallpox vaccine
979.1	ICD-9-CM	Diagnosis	Poisoning by rabies vaccine
979.2	ICD-9-CM	Diagnosis	Poisoning by typhus vaccine
979.3	ICD-9-CM	Diagnosis	Poisoning by yellow fever vaccine
979.4	ICD-9-CM	Diagnosis	Poisoning by measles vaccine
979.5	ICD-9-CM	Diagnosis	Poisoning by poliomyelitis vaccine
979.6	ICD-9-CM	Diagnosis	Poisoning by other and unspecified viral and rickettsial vaccines
979.7	ICD-9-CM	Diagnosis	Poisoning by mixed viral-rickettsial and bacterial vaccines, except combinations with pertussis component
979.9	ICD-9-CM	Diagnosis	Poisoning by other and unspecified vaccines and biological substances
980	ICD-9-CM	Diagnosis	Toxic effect of alcohol
980.0	ICD-9-CM	Diagnosis	Toxic effect of ethyl alcohol
980.1	ICD-9-CM	Diagnosis	Toxic effect of methyl alcohol
980.2	ICD-9-CM	Diagnosis	Toxic effect of isopropyl alcohol
980.3	ICD-9-CM	Diagnosis	Toxic effect of fusel oil
980.8	ICD-9-CM	Diagnosis	Toxic effect of other specified alcohols
980.9	ICD-9-CM	Diagnosis	Toxic effect of unspecified alcohol
981	ICD-9-CM	Diagnosis	Toxic effect of petroleum products
982	ICD-9-CM	Diagnosis	Toxic effect of solvents other than petroleum-based
982.0	ICD-9-CM	Diagnosis	Toxic effect of benzene and homologues
982.1	ICD-9-CM	Diagnosis	Toxic effect of carbon tetrachloride
982.2	ICD-9-CM	Diagnosis	Toxic effect of carbon disulfide
982.3	ICD-9-CM	Diagnosis	Toxic effect of other chlorinated hydrocarbon solvents
982.4	ICD-9-CM	Diagnosis	Toxic effect of nitroglycol
982.8	ICD-9-CM	Diagnosis	Toxic effect of other nonpetroleum-based solvents
983	ICD-9-CM	Diagnosis	Toxic effect of corrosive aromatics, acids, and caustic alkalis
983.0	ICD-9-CM	Diagnosis	Toxic effect of corrosive aromatics
983.1	ICD-9-CM	Diagnosis	Toxic effect of acids
983.2	ICD-9-CM	Diagnosis	Toxic effect of caustic alkalis
983.9	ICD-9-CM	Diagnosis	Toxic effect of caustic, unspecified
984	ICD-9-CM	Diagnosis	Toxic effect of lead and its compounds (including fumes)
984.0	ICD-9-CM	Diagnosis	Toxic effect of inorganic lead compounds
984.1	ICD-9-CM	Diagnosis	Toxic effect of organic lead compounds
984.8	ICD-9-CM	Diagnosis	Toxic effect of other lead compounds
984.9	ICD-9-CM	Diagnosis	Toxic effect of unspecified lead compound
985	ICD-9-CM	Diagnosis	Toxic effect of other metals
985.0	ICD-9-CM	Diagnosis	Toxic effect of mercury and its compounds
985.1	ICD-9-CM	Diagnosis	Toxic effect of arsenic and its compounds
985.2	ICD-9-CM	Diagnosis	Toxic effect of manganese and its compounds
985.3	ICD-9-CM	Diagnosis	Toxic effect of beryllium and its compounds
985.4	ICD-9-CM	Diagnosis	Toxic effect of antimony and its compounds
985.5	ICD-9-CM	Diagnosis	Toxic effect of cadmium and its compounds
985.6	ICD-9-CM	Diagnosis	Toxic effect of chromium



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
985.8	ICD-9-CM	Diagnosis	Toxic effect of other specified metals
985.9	ICD-9-CM	Diagnosis	Toxic effect of unspecified metal
986	ICD-9-CM	Diagnosis	Toxic effect of carbon monoxide
987	ICD-9-CM	Diagnosis	Toxic effect of other gases, fumes, or vapors
987.0	ICD-9-CM	Diagnosis	Toxic effect of liquefied petroleum gases
987.1	ICD-9-CM	Diagnosis	Toxic effect of other hydrocarbon gas
987.2	ICD-9-CM	Diagnosis	Toxic effect of nitrogen oxides
987.3	ICD-9-CM	Diagnosis	Toxic effect of sulfur dioxide
987.4	ICD-9-CM	Diagnosis	Toxic effect of freon
987.5	ICD-9-CM	Diagnosis	Toxic effect of lacrimogenic gas
987.6	ICD-9-CM	Diagnosis	Toxic effect of chlorine gas
987.7	ICD-9-CM	Diagnosis	Toxic effect of hydrocyanic acid gas
987.8	ICD-9-CM	Diagnosis	Toxic effect of other specified gases, fumes, or vapors
987.9	ICD-9-CM	Diagnosis	Toxic effect of unspecified gas, fume, or vapor
988	ICD-9-CM	Diagnosis	Toxic effect of noxious substances eaten as food
988.0	ICD-9-CM	Diagnosis	Toxic effect of fish and shellfish
988.1	ICD-9-CM	Diagnosis	Toxic effect of mushrooms
988.2	ICD-9-CM	Diagnosis	Toxic effect of berries and other plants
988.8	ICD-9-CM	Diagnosis	Toxic effect of other specified noxious substances
988.9	ICD-9-CM	Diagnosis	Toxic effect of unspecified noxious substance
989	ICD-9-CM	Diagnosis	Toxic effect of other substances, chiefly nonmedicinal as to source
989.0	ICD-9-CM	Diagnosis	Toxic effect of hydrocyanic acid and cyanides
989.1	ICD-9-CM	Diagnosis	Toxic effect of strychnine and salts
989.2	ICD-9-CM	Diagnosis	Toxic effect of chlorinated hydrocarbons
989.3	ICD-9-CM	Diagnosis	Toxic effect of organophosphate and carbamate
989.4	ICD-9-CM	Diagnosis	Toxic effect of other pesticides, not elsewhere classified
989.5	ICD-9-CM	Diagnosis	Toxic effect of venom
989.6	ICD-9-CM	Diagnosis	Toxic effect of soaps and detergents
989.7	ICD-9-CM	Diagnosis	Toxic effect of aflatoxin and other mycotoxin (food contaminants)
989.8	ICD-9-CM	Diagnosis	Toxic effect of other substances, chiefly nonmedicinal as to source
989.81	ICD-9-CM	Diagnosis	Toxic effect of asbestos
989.82	ICD-9-CM	Diagnosis	Toxic effect of latex
989.83	ICD-9-CM	Diagnosis	Toxic effect of silicone
989.84	ICD-9-CM	Diagnosis	Toxic effect of tobacco
989.89	ICD-9-CM	Diagnosis	Toxic effect of other substances
989.9	ICD-9-CM	Diagnosis	Toxic effect of unspecified substance, chiefly nonmedicinal as to source
E850	ICD-9-CM	Diagnosis	Accidental poisoning by analgesics, antipyretics, and antirheumatics
E850.0	ICD-9-CM	Diagnosis	Accidental poisoning by heroin
E850.1	ICD-9-CM	Diagnosis	Accidental poisoning by methadone
E850.2	ICD-9-CM	Diagnosis	Accidental poisoning by other opiates and related narcotics
E850.3	ICD-9-CM	Diagnosis	Accidental poisoning by salicylates
E850.4	ICD-9-CM	Diagnosis	Accidental poisoning by aromatic analgesics, not elsewhere classified
E850.5	ICD-9-CM	Diagnosis	Accidental poisoning by pyrazole derivatives



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
E850.6	ICD-9-CM	Diagnosis	Accidental poisoning by antirheumatics (antiphlogistics)
E850.7	ICD-9-CM	Diagnosis	Accidental poisoning by other non-narcotic analgesics
E850.8	ICD-9-CM	Diagnosis	Accidental poisoning by other specified analgesics and antipyretics
E850.9	ICD-9-CM	Diagnosis	Accidental poisoning by unspecified analgesic or antipyretic
E851	ICD-9-CM	Diagnosis	Accidental poisoning by barbiturates
E852	ICD-9-CM	Diagnosis	Accidental poisoning by other sedatives and hypnotics
E852.0	ICD-9-CM	Diagnosis	Accidental poisoning by chloral hydrate group
E852.1	ICD-9-CM	Diagnosis	Accidental poisoning by paraldehyde
E852.2	ICD-9-CM	Diagnosis	Accidental poisoning by bromine compounds
E852.3	ICD-9-CM	Diagnosis	Accidental poisoning by methaqualone compounds
E852.4	ICD-9-CM	Diagnosis	Accidental poisoning by glutethimide group
E852.5	ICD-9-CM	Diagnosis	Accidental poisoning by mixed sedatives, not elsewhere classified
E852.8	ICD-9-CM	Diagnosis	Accidental poisoning by other specified sedative and hypnotic
E852.9	ICD-9-CM	Diagnosis	Accidental poisoning by unspecified sedative or hypnotic
E853	ICD-9-CM	Diagnosis	Accidental poisoning by tranquilizers
E853.0	ICD-9-CM	Diagnosis	Accidental poisoning by phenothiazine-based tranquilizers
E853.1	ICD-9-CM	Diagnosis	Accidental poisoning by butyrophenone-based tranquilizers
E853.2	ICD-9-CM	Diagnosis	Accidental poisoning by benzodiazepine-based tranquilizers
E853.8	ICD-9-CM	Diagnosis	Accidental poisoning by other specified tranquilizers
E853.9	ICD-9-CM	Diagnosis	Accidental poisoning by unspecified tranquilizer
E854	ICD-9-CM	Diagnosis	Accidental poisoning by other psychotropic agents
E854.0	ICD-9-CM	Diagnosis	Accidental poisoning by antidepressants
E854.1	ICD-9-CM	Diagnosis	Accidental poisoning by psychodysleptics (hallucinogens)
E854.2	ICD-9-CM	Diagnosis	Accidental poisoning by psychostimulants
E854.3	ICD-9-CM	Diagnosis	Accidental poisoning by central nervous system stimulants
E854.8	ICD-9-CM	Diagnosis	Accidental poisoning by other psychotropic agents
E855	ICD-9-CM	Diagnosis	Accidental poisoning by other drugs acting on central and autonomic nervous system
E855.0	ICD-9-CM	Diagnosis	Accidental poisoning by anticonvulsant and anti-Parkinsonism drugs
E855.1	ICD-9-CM	Diagnosis	Accidental poisoning by other central nervous system depressants
E855.2	ICD-9-CM	Diagnosis	Accidental poisoning by local anesthetics
E855.3	ICD-9-CM	Diagnosis	Accidental poisoning by parasympathomimetics (cholinergics)
E855.4	ICD-9-CM	Diagnosis	Accidental poisoning by parasympatholytics (anticholinergics and antimuscarinics) and spasmolytics
E855.5	ICD-9-CM	Diagnosis	Accidental poisoning by sympathomimetics (adrenergics)
E855.6	ICD-9-CM	Diagnosis	Accidental poisoning by sympatholytics (antiadrenergics)
E855.8	ICD-9-CM	Diagnosis	Accidental poisoning by other specified drugs acting on central and autonomic nervous systems
E855.9	ICD-9-CM	Diagnosis	Accidental poisoning by unspecified drug acting on central and autonomic nervous systems
E856	ICD-9-CM	Diagnosis	Accidental poisoning by antibiotics
E857	ICD-9-CM	Diagnosis	Accidental poisoning by antibiotics Accidental poisoning by other anti-infectives
E858	ICD-9-CIVI	Diagnosis	Accidental poisoning by other drugs
L030	ICD-J-CIVI	Diagilosis	Accidental policining by other alago



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
E858.0	ICD-9-CM	Diagnosis	Accidental poisoning by hormones and synthetic substitutes
E858.1	ICD-9-CM	Diagnosis	Accidental poisoning by primarily systemic agents
E858.2	ICD-9-CM	Diagnosis	Accidental poisoning by agents primarily affecting blood constituents
E858.3	ICD-9-CM	Diagnosis	Accidental poisoning by agents primarily affecting cardiovascular system
E858.4	ICD-9-CM	Diagnosis	Accidental poisoning by agents primarily affecting gastrointestinal system
E858.5	ICD-9-CM	Diagnosis	Accidental poisoning by water, mineral, and uric acid metabolism drugs
E858.6	ICD-9-CM	Diagnosis	Accidental poisoning by agents primarily acting on the smooth and skeletal muscles and respiratory system
E858.7	ICD-9-CM	Diagnosis	Accidental poisoning by agents primarily affecting skin and mucous membrane, ophthalmological, otorhinolaryngological, and dental drugs
E858.8	ICD-9-CM	Diagnosis	Accidental poisoning by other specified drugs
E858.9	ICD-9-CM	Diagnosis	Accidental poisoning by unspecified drug
E860	ICD-9-CM	Diagnosis	Accidental poisoning by alcohol, not elsewhere classified
E860.0	ICD-9-CM	Diagnosis	Accidental poisoning by alcoholic beverages
E860.1	ICD-9-CM	Diagnosis	Accidental poisoning by other and unspecified ethyl alcohol and its products
E860.2	ICD-9-CM	Diagnosis	Accidental poisoning by methyl alcohol
E860.3	ICD-9-CM	Diagnosis	Accidental poisoning by isopropyl alcohol
E860.4	ICD-9-CM	Diagnosis	Accidental poisoning by fusel oil
E860.8	ICD-9-CM	Diagnosis	Accidental poisoning by other specified alcohols
E860.9	ICD-9-CM	Diagnosis	Accidental poisoning by unspecified alcohol
E861	ICD-9-CM	Diagnosis	Accidental poisoning by cleansing and polishing agents, disinfectants, paints, and varnishes
E861.0	ICD-9-CM	Diagnosis	Accidental poisoning by synthetic detergents and shampoos
E861.1	ICD-9-CM	Diagnosis	Accidental poisoning by soap products
E861.2	ICD-9-CM	Diagnosis	Accidental poisoning by polishes
E861.3	ICD-9-CM	Diagnosis	Accidental poisoning by other cleansing and polishing agents
E861.4	ICD-9-CM	Diagnosis	Accidental poisoning by disinfectants
E861.5	ICD-9-CM	Diagnosis	Accidental poisoning by lead paints
E861.6	ICD-9-CM	Diagnosis	Accidental poisoning by other paints and varnishes
E861.9	ICD-9-CM	Diagnosis	Accidental poisonings by unspecified cleansing and polishing agents, disinfectants, paints, and varnishes
E862	ICD-9-CM	Diagnosis	Accidental poisoning by petroleum products, other solvents and their vapors, not elsewhere classified
E862.0	ICD-9-CM	Diagnosis	Accidental poisoning by petroleum solvents
E862.1	ICD-9-CM	Diagnosis	Accidental poisoning by petroleum fuels and cleaners
E862.2	ICD-9-CM	Diagnosis	Accidental poisoning by lubricating oils
E862.3	ICD-9-CM	Diagnosis	Accidental poisoning by petroleum solids
E862.4	ICD-9-CM	Diagnosis	Accidental poisoning by other specified solvents
E862.9	ICD-9-CM	Diagnosis	Accidental poisoning by unspecified solvent
E863	ICD-9-CM	Diagnosis	Accidental poisoning by agricultural and horticultural chemical and pharmaceutical preparations other than plant foods and fertilizers
E863.0	ICD-9-CM	Diagnosis	Accidental poisoning by insecticides of organochlorine compounds



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
E863.1	ICD-9-CM	Diagnosis	Accidental poisoning by insecticides of organophosphorus compounds
E863.2	ICD-9-CM	Diagnosis	Accidental poisoning by carbamates
E863.3	ICD-9-CM	Diagnosis	Accidental poisoning by mixtures of insecticides
E863.4	ICD-9-CM	Diagnosis	Accidental poisoning by other and unspecified insecticides
E863.5	ICD-9-CM	Diagnosis	Accidental poisoning by herbicides
E863.6	ICD-9-CM	Diagnosis	Accidental poisoning by fungicides
E863.7	ICD-9-CM	Diagnosis	Accidental poisoning by rodenticides
E863.8	ICD-9-CM	Diagnosis	Accidental poisoning by fumigants
E863.9	ICD-9-CM	Diagnosis	Accidental poisoning by other and unspecified agricultural and horticultural
			chemical and pharmaceutical preparations other than plant foods and fertilizers
E864	ICD-9-CM	Diagnosis	Accidental poisoning by corrosives and caustics, not elsewhere classified
E864.0	ICD-9-CM	Diagnosis	Accidental poisoning by corrosive aromatics not elsewhere classified
E864.1	ICD-9-CM	Diagnosis	Accidental poisoning by acids not elsewhere classified
E864.2	ICD-9-CM	Diagnosis	Accidental poisoning by caustic alkalis not elsewhere classified
E864.3	ICD-9-CM	Diagnosis	Accidental poisoning by other specified corrosives and caustics not elsewhere classified
E864.4	ICD-9-CM	Diagnosis	Accidental poisoning by unspecified corrosives and caustics not elsewhere classified
E865	ICD-9-CM	Diagnosis	Accidental poisoning from poisonous foodstuffs and poisonous plants
E865.0	ICD-9-CM	Diagnosis	Accidental poisoning by meat
865.1	ICD-9-CM	Diagnosis	Accidental poisoning by shellfish
E865.2	ICD-9-CM	Diagnosis	Accidental poisoning from other fish
E865.3	ICD-9-CM	Diagnosis	Accidental poisoning from berries and seeds
E865.4	ICD-9-CM	Diagnosis	Accidental poisoning from other specified plants
E865.5	ICD-9-CM	Diagnosis	Accidental poisoning from mushrooms and other fungi
E865.8	ICD-9-CM	Diagnosis	Accidental poisoning from other specified foods
E865.9	ICD-9-CM	Diagnosis	Accidental poisoning from unspecified foodstuff or poisonous plant
E866	ICD-9-CM	Diagnosis	Accidental poisoning by other and unspecified solid and liquid substances
E866.0	ICD-9-CM	Diagnosis	Accidental poisoning by lead and its compounds and fumes
E866.1	ICD-9-CM	Diagnosis	Accidental poisoning by mercury and its compounds and fumes
E866.2	ICD-9-CM	Diagnosis	Accidental poisoning by antimony and its compounds and fumes
E866.3	ICD-9-CM	Diagnosis	Accidental poisoning by arsenic and its compounds and fumes
E866.4	ICD-9-CM	Diagnosis	Accidental poisoning by other metals and their compounds and fumes
E866.5	ICD-9-CM	Diagnosis	Accidental poisoning by plant foods and fertilizers
E866.6	ICD-9-CM	Diagnosis	Accidental poisoning by glues and adhesives
E866.7	ICD-9-CM	Diagnosis	Accidental poisoning by cosmetics
E866.8	ICD-9-CM	Diagnosis	Accidental poisoning by other specified solid or liquid substances
E866.9	ICD-9-CM	Diagnosis	Accidental poisoning by unspecified solid or liquid substance
E867	ICD-9-CM	Diagnosis	Accidental poisoning by gas distributed by pipeline
E868	ICD-9-CM	Diagnosis	Accidental poisoning by other utility gas and other carbon monoxide
E868.0	ICD-9-CM	Diagnosis	Accidental poisoning by liquefied petroleum gas distributed in mobile containers



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
E868.1	ICD-9-CM	Diagnosis	Accidental poisoning by other and unspecified utility gas
E868.2	ICD-9-CM	Diagnosis	Accidental poisoning by motor vehicle exhaust gas
E868.3	ICD-9-CM	Diagnosis	Accidental poisoning by carbon monoxide from incomplete combustion of other domestic fuels
E868.8	ICD-9-CM	Diagnosis	Accidental poisoning by carbon monoxide from other sources
E868.9	ICD-9-CM	Diagnosis	Accidental poisoning by unspecified carbon monoxide
E869	ICD-9-CM	Diagnosis	Accidental poisoning by other gases and vapors
E869.0	ICD-9-CM	Diagnosis	Accidental poisoning by nitrogen oxides
E869.1	ICD-9-CM	Diagnosis	Accidental poisoning by sulfur dioxide
E869.2	ICD-9-CM	Diagnosis	Accidental poisoning by freon
E869.3	ICD-9-CM	Diagnosis	Accidental poisoning by lacrimogenic gas (tear gas)
E869.4	ICD-9-CM	Diagnosis	Accidental poisoning by second-hand tobacco smoke
E869.8	ICD-9-CM	Diagnosis	Accidental poisoning by other specified gases and vapors
E869.9	ICD-9-CM	Diagnosis	Accidental poisoning by unspecified gases and vapors
E950	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by solid or liquid substances
E950.0	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by analgesics, antipyretics, and antirheumatics
E950.1	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by barbiturates
E950.2	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by other sedatives and hypnotics
E950.3	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by tranquilizers and other psychotropic agents
E950.4	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by other specified drugs and medicinal substances
E950.5	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by unspecified drug or medicinal substance
E950.6	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by agricultural and horticultural chemical and pharmaceutical preparations other than plant foods and fertilizers
E950.7	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by corrosive and caustic substances
E950.8	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by arsenic and its compounds
E950.9	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by other and unspecified solid and liquid substances
E951	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by gases in domestic use
E951.0	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by gas distributed by pipeline
E951.1	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by liquefied petroleum gas distributed in mobile containers
E951.8	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by other utility gas
E952	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by other gases and vapors
E952.0	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by motor vehicle exhaust gas
E952.1	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by other carbon monoxide
E952.8	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by other specified gases and vapors
E952.9	ICD-9-CM	Diagnosis	Suicide and self-inflicted poisoning by unspecified gases and vapors
E962	ICD-9-CM	Diagnosis	Assault by poisoning



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
E962.0	ICD-9-CM	Diagnosis	Assault by drugs and medicinal substances
E962.1	ICD-9-CM	Diagnosis	Assault by other solid and liquid substances
E962.2	ICD-9-CM	Diagnosis	Assault by other gases and vapors
E962.9	ICD-9-CM	Diagnosis	Assault by unspecified poisoning
E972	ICD-9-CM	Diagnosis	Injury due to legal intervention by gas
E975	ICD-9-CM	Diagnosis	Injury due to legal intervention by other specified means
E976	ICD-9-CM	Diagnosis	Injury due to legal intervention by unspecified means
E980	ICD-9-CM	Diagnosis	Poisoning by solid or liquid substances, undetermined whether accidentally or purposely inflicted
E980.0	ICD-9-CM	Diagnosis	Poisoning by analgesics, antipyretics, and antirheumatics, undetermined whether accidentally or purposely inflicted
E980.1	ICD-9-CM	Diagnosis	Poisoning by barbiturates, undetermined whether accidentally or purposely inflicted
E980.2	ICD-9-CM	Diagnosis	Poisoning by other sedatives and hypnotics, undetermined whether accidentally or purposely inflicted
E980.3	ICD-9-CM	Diagnosis	Poisoning by tranquilizers and other psychotropic agents, undetermined whether accidentally or purposely inflicted
E980.4	ICD-9-CM	Diagnosis	Poisoning by other specified drugs and medicinal substances, undetermined whether accidentally or purposely inflicted
E980.5	ICD-9-CM	Diagnosis	Poisoning by unspecified drug or medicinal substance, undetermined whether accidentally or purposely inflicted
E980.6	ICD-9-CM	Diagnosis	Poisoning by corrosive and caustic substances, undetermined whether accidentally or purposely inflicted
E980.7	ICD-9-CM	Diagnosis	Poisoning by agricultural and horticultural chemical and pharmaceutical preparations other than plant foods and fertilizers, undetermined whether accidentally or purposely inflicted
E980.8	ICD-9-CM	Diagnosis	Poisoning by arsenic and its compounds, undetermined whether accidentally or
E980.9	ICD-9-CM	Diagnosis	Poisoning by other and unspecified solid and liquid substances, undetermined whether accidentally or purposely inflicted
E981	ICD-9-CM	Diagnosis	Poisoning by gases in domestic use, undetermined whether accidentally or purposely inflicted
E981.0	ICD-9-CM	Diagnosis	Poisoning by gas distributed by pipeline, undetermined whether accidentally or
E981.1	ICD-9-CM	Diagnosis	Poisoning by liquefied petroleum gas distributed in mobile containers, undetermined whether accidentally or purposely inflicted
E981.8	ICD-9-CM	Diagnosis	Poisoning by other utility gas, undetermined whether accidentally or purposely inflicted
E982	ICD-9-CM	Diagnosis	Poisoning by other gases, undetermined whether accidentally or purposely inflicted
E982.0	ICD-9-CM	Diagnosis	Poisoning by motor vehicle exhaust gas, undetermined whether accidentally or
E982.1	ICD-9-CM	Diagnosis	Poisoning by other carbon monoxide, undetermined whether accidentally or purposely inflicted
E982.8	ICD-9-CM	Diagnosis	Poisoning by other specified gases and vapors, undetermined whether accidentally or purposely inflicted



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
E982.9	ICD-9-CM	Diagnosis	Poisoning by unspecified gases and vapors, undetermined whether accidentally or purposely inflicted
			Head Injury
851.46	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, loss of consciousness of unspecified duration
851.45	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-
851.16	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, loss of consciousness of unspecified duration
854.15	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.50	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, unspecified state of consciousness
851.92	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, brief (less than 1 hour) loss of consciousness
854.14	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
854.04	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
854.02	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness
852.42	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness
850.3	ICD-9-CM	Diagnosis	Concussion with prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
854.0	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature without mention of open intracranial wound
851.72	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, brief (less than one hour) loss of consciousness
851.39	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, unspecified concussion
851.73	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, moderate (1-24 hours) loss of consciousness
852.02	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness
852.50	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, state of consciousness unspecified
851.00	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, state of consciousness unspecified



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

·		Code	
Code	Code Type	Category	Description
851.33	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, moderate (1-24 hours) loss of consciousness
851.21	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound, no loss of consciousness
851.56	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, loss of consciousness of unspecified duration
852.25	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
852.33	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness
851.36	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, loss of consciousness of unspecified duration
853.01	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness
851	ICD-9-CM	Diagnosis	Cerebral laceration and contusion
852.19	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, unspecified concussion
853.04	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to preexisting conscious level
852.05	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.65	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.0	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound
851.69	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, unspecified concussion
851.35	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
852.2	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury without mention of open intracranial wound
851.70	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, state of consciousness unspecified
851.52	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, brief (less than 1 hour) loss of consciousness
851.93	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, moderate (1-24 hours) loss of consciousness



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
852.14	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
851.64	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
851.82	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness
853.19	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, unspecified concussion
850.4	ICD-9-CM	Diagnosis	Concussion with prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
850.5	ICD-9-CM	Diagnosis	Concussion with loss of consciousness of unspecified duration
851.66	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, loss of consciousness of unspecified duration
853.0	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound
851.14	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
851.15	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
853.02	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness
852.06	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration
852.44	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
853.15	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open
852.01	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness
850.1	ICD-9-CM	Diagnosis	Concussion with brief (less than one hour) loss of consciousness
851.54	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
851.76	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, loss of consciousness of unspecified duration
852.31	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, no loss of consciousness



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
853.14	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
851.19	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, unspecified concussion
851.83	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness
851.95	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
852.29	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, unspecified concussion
851.8	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound
852.24	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to preexisting conscious level
852.45	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
852.03	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, without mention of open intracranial
853.09	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, unspecified concussion
852.55	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
852.34	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
850.2	ICD-9-CM	Diagnosis	Concussion with moderate (1-24 hours) loss of consciousness
852.39	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, unspecified concussion
854.01	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, no loss of consciousness
851.63	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness
851.12	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, brief (less than 1 hour) loss of consciousness
850.9	ICD-9-CM	Diagnosis	Unspecified concussion
851.49	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, unspecified concussion
853.16	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
851.80	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, unspecified state of consciousness
852.23	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness
851.1	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound
851.24	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
854.09	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, unspecified concussion
851.2	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound
852.21	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness
851.75	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.22	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness
852.54	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
851.84	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to preexisting conscious level
854.06	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, loss of consciousness of unspecified duration
851.79	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, unspecified
851.6	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound
852.30	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, state of consciousness unspecified
854.1	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature with open intracranial wound
851.23	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound,
851.10	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, unspecified state of consciousness
853.10	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, unspecified state of consciousness
852.20	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness
851.20	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound, unspecified state of consciousness



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
852.59	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, unspecified concussion
854.12	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, brief (less than 1 hour) loss of consciousness
850.11	ICD-9-CM	Diagnosis	Concussion, with loss of consciousness of 30 minutes or less
852.3	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound
854.00	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, unspecified state of consciousness
851.99	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, unspecified concussion
852.04	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
852.10	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, unspecified state of consciousness
851.55	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
852.51	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, no loss of consciousness
853.11	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, no loss of consciousness
851.40	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, unspecified state of consciousness
851.05	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.74	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
851.25	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.85	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
852.49	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial wound, unspecified concussion
852.5	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury with open intracranial wound
851.32	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, brief (less than 1 hour) loss of consciousness



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
851.34	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
851.13	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, moderate (1-24 hours) loss of consciousness
854.11	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, no loss of consciousness
852	ICD-9-CM	Diagnosis	Subarachnoid, subdural, and extradural hemorrhage, following injury
853.05	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury. Without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
852.12	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness
852.43	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness
854.05	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open
851.03	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness
853.03	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness
852.4	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury without mention of open intracranial wound
851.94	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
851.30	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, unspecified state of consciousness
851.42	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness
851.62	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness
851.3	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound
851.9	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound
851.91	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, no loss of consciousness
854	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature
851.31	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, no loss of consciousness
852.00	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
852.15	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.01	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, no loss of consciousness
851.02	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness
851.81	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, no loss of consciousness
854.03	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness
851.7	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound
852.36	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration
851.90	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, unspecified state of consciousness
852.26	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration
852.52	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness
854.19	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, with unspecified concussion
852.32	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness
851.5	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound
851.43	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness
853.06	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration
851.60	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, unspecified state of consciousness
851.51	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, no loss of consciousness
851.59	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, unspecified concussion
851.89	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, unspecified concussion
851.09	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, unspecified concussion
851.11	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, no loss of consciousness



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
851.61	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, no loss of consciousness
852.0	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury without mention of open intracranial wound
851.29	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound, unspecified concussion
851.86	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, loss of consciousness of unspecified duration
852.53	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness
852.11	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, no loss of consciousness
852.41	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness
854.16	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, loss of consciousness of unspecified duration
851.06	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, loss of consciousness of unspecified duration
852.1	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound
853.12	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness
851.71	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, no loss of consciousness
852.46	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration
854.10	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, unspecified state of consciousness
851.04	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
854.13	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, moderate (1-24 hours) loss of consciousness
851.96	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, loss of consciousness of unspecified duration
853	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury
851.26	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound, loss of consciousness of unspecified duration
850	ICD-9-CM	Diagnosis	Concussion
853.00	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness
850.0	ICD-9-CM	Diagnosis	Concussion with no loss of consciousness
852.16	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
852.40	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness
851.4	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound
851.44	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss consciousness and return to pre-existing conscious level
959.01	ICD-9-CM	Diagnosis	Head injury, unspecified
852.35	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
852.13	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness
851.53	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, moderate (1-24 hours) loss of consciousness
852.09	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, without mention of open intracranial
853.13	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness
852.22	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, brief (less than one hour) loss of consciousness
850.12	ICD-9-CM	Diagnosis	Concussion, with loss of consciousness 31 to 59 minutes
852.56	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration
853.1	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury with open intracranial wound
851.41	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, no loss of consciousness
907.0	ICD-9-CM	Diagnosis	Late effect of intracranial injury without mention of skull fracture
			Myocardial Infarction
410	ICD-9-CM	Diagnosis	Acute myocardial infarction
410.0	ICD-9-CM	Diagnosis	Acute myocardial infarction of anterolateral wall
410.00	ICD-9-CM	Diagnosis	Acute myocardial infarction of anterolateral wall, episode of care unspecified
410.01	ICD-9-CM	Diagnosis	Acute myocardial infarction of anterolateral wall, initial episode of care
410.02	ICD-9-CM	Diagnosis	Acute myocardial infarction of anterolateral wall, subsequent episode of care
410.1	ICD-9-CM	Diagnosis	Acute myocardial infarction of other anterior wall
410.10	ICD-9-CM	Diagnosis	Acute myocardial infarction of other anterior wall, episode of care unspecified
410.11	ICD-9-CM	Diagnosis	Acute myocardial infarction of other anterior wall, initial episode of care
410.12	ICD-9-CM	Diagnosis	Acute myocardial infarction of other anterior wall, subsequent episode of care
410.2	ICD-9-CM	Diagnosis	Acute myocardial infarction of inferolateral wall



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
410.20	ICD-9-CM	Diagnosis	Acute myocardial infarction of inferolateral wall, episode of care unspecified
410.21	ICD-9-CM	Diagnosis	Acute myocardial infarction of inferolateral wall, initial episode of care
410.22	ICD-9-CM	Diagnosis	Acute myocardial infarction of inferolateral wall, subsequent episode of care
410.3	ICD-9-CM	Diagnosis	Acute myocardial infarction of inferoposterior wall
410.30	ICD-9-CM	Diagnosis	Acute myocardial infarction of inferoposterior wall, episode of care unspecified
410.31	ICD-9-CM	Diagnosis	Acute myocardial infarction of inferoposterior wall, initial episode of care
410.32	ICD-9-CM	Diagnosis	Acute myocardial infarction of inferoposterior wall, subsequent episode of care
410.4	ICD-9-CM	Diagnosis	Acute myocardial infarction of other inferior wall
410.40	ICD-9-CM	Diagnosis	Acute myocardial infarction of other inferior wall, episode of care unspecified
410.41	ICD-9-CM	Diagnosis	Acute myocardial infarction of other inferior wall, initial episode of care
410.42	ICD-9-CM	Diagnosis	Acute myocardial infarction of other inferior wall, subsequent episode of care
410.5	ICD-9-CM	Diagnosis	Acute myocardial infarction of other lateral wall
410.50	ICD-9-CM	Diagnosis	Acute myocardial infarction of other lateral wall, episode of care unspecified
410.51	ICD-9-CM	Diagnosis	Acute myocardial infarction of other lateral wall, initial episode of care
410.52	ICD-9-CM	Diagnosis	Acute myocardial infarction of other lateral wall, subsequent episode of care
410.6	ICD-9-CM	Diagnosis	Acute myocardial infarction, true posterior wall infarction
410.60	ICD-9-CM	Diagnosis	Acute myocardial infarction, true posterior wall infarction, episode of care unspecified
410.61	ICD-9-CM	Diagnosis	Acute myocardial infarction, true posterior wall infarction, initial episode of care
410.62	ICD-9-CM	Diagnosis	Acute myocardial infarction, true posterior wall infarction, subsequent episode of care
410.7	ICD-9-CM	Diagnosis	Acute myocardial infarction, subendocardial infarction
410.70	ICD-9-CM	Diagnosis	Acute myocardial infarction, subendocardial infarction, episode of care unspecified
410.71	ICD-9-CM	Diagnosis	Acute myocardial infarction, subendocardial infarction, initial episode of care
410.72	ICD-9-CM	Diagnosis	Acute myocardial infarction, subendocardial infarction, subsequent episode of care
410.8	ICD-9-CM	Diagnosis	Acute myocardial infarction of other specified sites
410.80	ICD-9-CM	Diagnosis	Acute myocardial infarction of other specified sites, episode of care unspecified
410.81	ICD-9-CM	Diagnosis	Acute myocardial infarction of other specified sites, initial episode of care
410.82	ICD-9-CM	Diagnosis	Acute myocardial infarction of other specified sites, subsequent episode of care



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code				
Code	Code Type	Category	Description			
410.9	ICD-9-CM	Diagnosis	Acute myocardial infarction, unspecified site			
410.90	ICD-9-CM	Diagnosis	Acute myocardial infarction, unspecified site, episode of care unspecified			
410.91	ICD-9-CM	Diagnosis	Acute myocardial infarction, unspecified site, initial episode of care			
410.92	ICD-9-CM	Diagnosis	Acute myocardial infarction, unspecified site, subsequent episode of care			
	Stroke					
433.01	ICD-9-CM	Diagnosis	Occlusion and stenosis of basilar artery with cerebral infarction			
433.11	ICD-9-CM	Diagnosis	Occlusion and stenosis of carotid artery with cerebral infarction			
433.21	ICD-9-CM	Diagnosis	Occlusion and stenosis of vertebral artery with cerebral infarction			
433.31	ICD-9-CM	Diagnosis	Occlusion and stenosis of multiple and bilateral precerebral arteries with cerebral infarction			
433.81	ICD-9-CM	Diagnosis	Occlusion and stenosis of other specified precerebral artery with cerebral infarction			
433.91	ICD-9-CM	Diagnosis	Occlusion and stenosis of unspecified precerebral artery with cerebral infarction			
434.01	ICD-9-CM	Diagnosis	Cerebral thrombosis with cerebral infarction			
434.11	ICD-9-CM	Diagnosis	Cerebral embolism with cerebral infarction			
434.91	ICD-9-CM	Diagnosis	Cerebral artery occlusion, unspecified, with cerebral infarction			
436	ICD-9-CM	Diagnosis	Acute, but ill-defined, cerebrovascular disease			
		<u> </u>	Kidney Disease			
584.5	ICD-9-CM	Diagnosis	Acute kidney failure with lesion of tubular necrosis			
585.9	ICD-9-CM	Diagnosis	Chronic kidney disease, unspecified			
584	ICD-9-CM	Diagnosis	Acute kidney failure			
585.3	ICD-9-CM	Diagnosis	Chronic kidney disease, Stage III (moderate)			
586	ICD-9-CM	Diagnosis	Unspecified renal failure			
584.7	ICD-9-CM	Diagnosis	Acute kidney failure with lesion of medullary [papillary] necrosis			
V45.11	ICD-9-CM	Diagnosis	Renal dialysis status			
584.9	ICD-9-CM	Diagnosis	Acute kidney failure, unspecified			
585.5	ICD-9-CM	Diagnosis	Chronic kidney disease, Stage V			
585.4	ICD-9-CM	Diagnosis	Chronic kidney disease, Stage IV (severe)			
584.8	ICD-9-CM	Diagnosis	Acute kidney failure with other specified pathological lesion in kidney			
585	ICD-9-CM	Diagnosis	Chronic kidney disease (CKD)			
585.1	ICD-9-CM	Diagnosis	Chronic kidney disease, Stage I			
584.6	ICD-9-CM	Diagnosis	Acute kidney failure with lesion of renal cortical necrosis			
585.2	ICD-9-CM	Diagnosis	Chronic kidney disease, Stage II (mild)			
90960	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services monthly, for patients 20 years of age and older; with 4 or more face-to-face visits by a physician or other qualified health care professional per month			
90970	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients 20 years of age and older			



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
90953	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month
90964	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents
90945	ICD-9-CM	Procedure	Dialysis procedure other than hemodialysis (eg, peritoneal dialysis, hemofiltration, or other continuous renal replacement therapies), with single evaluation by a physician or other qualified health care professional
90959	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month
90947	ICD-9-CM	Procedure	Dialysis procedure other than hemodialysis (eg, peritoneal dialysis, hemofiltration, or other continuous renal replacement therapies) requiring repeated evaluations by a physician or other qualified health care professional, with or without substantial revision of dialysis prescription
90954	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month
90966	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients 20 years of age and older
90957	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month
90968	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients 2-11 years of age



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
90958	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services monthly, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month
90997	ICD-9-CM	Procedure	Hemoperfusion (eg, with activated charcoal or resin)
90967	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients younger than 2 years of age
90951	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 4 or more face-to-face visits by a physician or other qualified health care professional per month
90935	ICD-9-CM	Procedure	Hemodialysis procedure with single evaluation by a physician or other qualified health care professional
90952	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services monthly, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month
90956	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 1 face-to-face visit by a physician or other qualified health care professional per month
90962	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services monthly, for patients 20 years of age and older; with 1 face-to-face visit by a physician or other qualified health care professional per month
90955	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services monthly, for patients 2-11 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents; with 2-3 face-to-face visits by a physician or other qualified health care professional per month
90963	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients younger than 2 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents
90937	ICD-9-CM	Procedure	Hemodialysis procedure requiring repeated evaluation(s) with or without substantial revision of dialysis prescription
G0257	ICD-9-CM	Procedure	Unscheduled or emergency dialysis treatment for an ESRD patient in a hospital outpatient department that is not certified as an ESRD facility
90999	ICD-9-CM	Procedure	Unlisted dialysis procedure, inpatient or outpatient



Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Diagnosis and Procedure Codes used to Define Exclusions, in Any Care Setting, and Any Diagnosis Position, in this Request

		Code	
Code	Code Type	Category	Description
90965	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services for home dialysis per full month, for patients 12-19 years of age to include monitoring for the adequacy of nutrition, assessment of growth and development, and counseling of parents
90969	ICD-9-CM	Procedure	End-stage renal disease (ESRD) related services for dialysis less than a full month of service, per day; for patients 12-19 years of age
			Head/Neck MRI
70551	ICD-9-CM	Procedure	MRI Head w/o contrast
70540	ICD-9-CM	Procedure	MRI Face, orbit, neck w/o contrast
70552	ICD-9-CM	Procedure	MRI Head w/ contrast
70542	ICD-9-CM	Procedure	MRI Face, orbit, neck with contrast
70553	ICD-9-CM	Procedure	MRI Head w/ & w/o contrast
70543	ICD-9-CM	Procedure	MRI Face, orbit, neck w/ & w/o contrast



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code			
Code	Type	Category	Description		
	Advanced Liver Disease				
456.0	ICD-9-CM	•	Esophageal varices with bleeding		
456.20	ICD-9-CM	_	Esophageal varices with bleeding in disease classified elsewhere		
456.1		_	Esophageal varices without mention of bleeding		
456.21	ICD-9-CM	Diagnosis	Esophageal varices without mention of bleeding		
456.2	ICD-9-CM	Diagnosis	Esophageal varices in diseases classified elsewhere		
456.21	ICD-9-CM	Diagnosis	Esophageal varices without mention of bleeding in diseases classified elsewhere		
572.2		•	Hepatic encephalopathy		
572.3		_	Portal hypertension		
572.4		_	Hepatorenal syndrome		
572.8	ICD-9-CM	Diagnosis	Other sequelae of chronic liver disease		
			Allergy		
477.0		_	Allergic rhinitis due to pollen		
477.1		_	Allergic rhinitis, due to food		
477.2		•	Allergic rhinitis due to animal (cat) (dog) hair and dander		
477.8		_	Allergic rhinitis due to other allergen		
477.9	ICD-9-CM	_	Allergic rhinitis, cause unspecified		
518.6	ICD-9-CM	_	Allergic bronchopulmonary aspergillosis		
558.3		_	Gastroenteritis and colitis, allergic		
691.0	ICD-9-CM	_	Diaper or napkin rash		
691.8	ICD-9-CM	_	Other atopic dermatitis and related conditions		
692.0	ICD-9-CM	Diagnosis	Contact dermatitis and other eczema due to detergents		
692.1	ICD-9-CM	Diagnosis	Contact dermatitis and other eczema due to oils and greases		
692.2	ICD-9-CM	Diagnosis	Contact dermatitis and other eczema due to solvents		
692.3	ICD-9-CM	Diagnosis	Contact dermatitis and other eczema due to drugs and medicines in contact with		
			skin		
692.4		•	Contact dermatitis and other eczema due to other chemical products		
692.5	ICD-9-CM	Diagnosis	Contact dermatitis and other eczema due to food in contact with skin		
692.6		_	Contact dermatitis and other eczema due to plants (except food)		
692.7	ICD-9-CM	Diagnosis	Contact dermatitis and other eczema due to solar radiation		
692.8	ICD-9-CM	Diagnosis	Contact dermatitis and other eczema due to other specified agents		
692.9	ICD-9-CM	Diagnosis	Contact dermatitis and other eczema, due to unspecified cause		
692.73	ICD-9-CM	Diagnosis	Actinic reticuloid and actinic granuloma		
692.72	ICD-9-CM	Diagnosis	Acute dermatitis due to solar radiation		
692.84	ICD-9-CM	Diagnosis	Contact dermatitis and other eczema due to animal (cat) (dog) dander		
692.89	ICD-9-CM	Diagnosis	Contact dermatitis and other eczema due to other specified agent		
692.71	ICD-9-CM	Diagnosis	Contact dermatitis and other eczema due to sunburn		



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

,	Code	Code	
Code	Type	Category	Description
692.81	ICD-9-CM	Diagnosis	Dermatitis due to cosmetics
692.83	ICD-9-CM	Diagnosis	Dermatitis due to metals
692.82	ICD-9-CM	Diagnosis	Dermatitis due to other radiation
692.75	ICD-9-CM	Diagnosis	Disseminated superficial actinic porokeratosis (DSAP)
692.74	ICD-9-CM	Diagnosis	Other chronic dermatitis due to solar radiation
692.79	ICD-9-CM	Diagnosis	Other dermatitis due to solar radiation
692.76	ICD-9-CM	Diagnosis	Sunburn of second degree
692.77	ICD-9-CM	Diagnosis	Sunburn of third degree
693.0	ICD-9-CM	Diagnosis	Dermatitis due to drugs and medicines taken internally
693.1	ICD-9-CM	Diagnosis	Dermatitis due to food taken internally
693.8	ICD-9-CM	Diagnosis	Dermatitis due to other specified substances taken internally
693.9	ICD-9-CM	Diagnosis	Dermatitis due to unspecified substance taken internally
708.0	ICD-9-CM	Diagnosis	Allergic urticaria
708.1	ICD-9-CM	Diagnosis	Idiopathic urticaria
708.2	ICD-9-CM	Diagnosis	Urticaria due to cold and heat
708.3	ICD-9-CM	Diagnosis	Dermatographic urticaria
708.4	ICD-9-CM	Diagnosis	Vibratory urticaria
708.5	ICD-9-CM	Diagnosis	Cholinergic urticaria
708.8	ICD-9-CM	Diagnosis	Other specified urticaria
708.9	ICD-9-CM	Diagnosis	Unspecified urticaria
995.0	ICD-9-CM	Diagnosis	Other anaphylactic reaction
995.1	ICD-9-CM	Diagnosis	Angioneurotic edema not elsewhere classified
995.2	ICD-9-CM	Diagnosis	Other and unspecified adverse effect of drug, medicinal and biological substance
995.3	ICD 0 CM	Diagnosis	Allergy, unspecified not elsewhere classified
995.4	ICD-9-CM	_	Shock due to anesthesia not elsewhere classified
		•	Child maltreatment syndrome
995.5 995.6		_	Anaphylactic reaction due to food
995.60	ICD-9-CIVI	_	Anaphylactic reaction due to hood Anaphylactic reaction due to unspecified food
995.61		_	Anaphylactic reaction due to unspecified rood Anaphylactic reaction due to peanuts
995.62	ICD-9-CM	_	Anaphylactic reaction due to peanuts Anaphylactic reaction due to crustaceans
995.63	ICD-9-CM	Diagnosis	Anaphylactic reaction due to fruits and vegetables
995.64	ICD-9-CM	•	Anaphylactic reaction due to tree nuts and seeds
995.65	ICD-9-CM	_	Anaphylactic reaction due to fish
995.66	ICD-9-CM		Anaphylactic reaction due to fish Anaphylactic reaction due to food additives
995.67	ICD-9-CM	_	Anaphylactic reaction due to milk products
995.68	ICD-9-CM	_	Anaphylactic reaction due to eggs
995.69	ICD-9-CM	Diagnosis	Anaphylactic reaction due to other specified food
995.7	ICD-9-CM	•	
995.8	ICD-9-CM	J	Other specified adverse effects, not elsewhere classified
<i>JJJ</i> .0	100-3-0101	Diagilosis	Other specified deverse effects, not eisewhere classified



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

Code Type Category Description	
995.9 ICD-9-CM Diagnosis Systemic inflammatory response syndrome (SIRS)	
V07.1 ICD-9-CM Diagnosis ALLERGIC REACTION	
V13.81 ICD-9-CM Diagnosis ALLERGIC REACTION	
V14.0 ICD-9-CM Diagnosis Personal history of allergy to penicillin	
V14.1 ICD-9-CM Diagnosis Personal history of allergy to other antibiotic agent	
V14.2 ICD-9-CM Diagnosis Personal history of allergy to sulfonamides	
V14.3 ICD-9-CM Diagnosis Personal history of allergy to other anti-infective agen	ıt
V14.4 ICD-9-CM Diagnosis Personal history of allergy to anesthetic agent	
V14.5 ICD-9-CM Diagnosis Personal history of allergy to narcotic agent	
V14.6 ICD-9-CM Diagnosis Personal history of allergy to analgesic agent	
V14.7 ICD-9-CM Diagnosis Personal history of allergy to serum or vaccine	
V14.8 ICD-9-CM Diagnosis Personal history of allergy to other specified medicina	l agents
V14.9 ICD-9-CM Diagnosis Personal history of allergy to unspecified medicinal ag	gent
V15.0 ICD-9-CM Diagnosis ALLERGIC REACTION	
V72.7 ICD-9-CM Diagnosis ALLERGIC REACTION	
Chronic Heart Failure	
402.01 ICD-9-CM Diagnosis Malignant hypertensive heart disease with heart failure	re
402.11 ICD-9-CM Diagnosis Benign hypertensive heart disease with heart failure	
402.91 ICD-9-CM Diagnosis Unspecified hypertensive heart disease with heart fail	ure
425.0 ICD-9-CM Diagnosis Endomyocardial fibrosis	
425.1 ICD-9-CM Diagnosis Hypertrophic cardiomyopathy	
425.11 ICD-9-CM Diagnosis Hypertrophic obstructive cardiomyopathy	
425.18 ICD-9-CM Diagnosis Other hypertrophic cardiomyopathy	
425.2 ICD-9-CM Diagnosis Obscure cardiomyopathy of Africa	
425.3 ICD-9-CM Diagnosis Endocardial fibroelastosis	
425.4 ICD-9-CM Diagnosis Other primary cardiomyopathies	
425.5 ICD-9-CM Diagnosis Alcoholic cardiomyopathy	
425.7 ICD-9-CM Diagnosis Nutritional and metabolic cardiomyopathy	
425.8 ICD-9-CM Diagnosis Cardiomyopathy in other diseases classified elsewhere	e
425.9 ICD-9-CM Diagnosis Unspecified secondary cardiomyopathy	
428.0 ICD-9-CM Diagnosis Congestive heart failure, unspecified	
428.1 ICD-9-CM Diagnosis Left heart failure	
428.2 ICD-9-CM Diagnosis Systolic heart failure	
428.20 ICD-9-CM Diagnosis Unspecified systolic heart failure	
428.21 ICD-9-CM Diagnosis Acute systolic heart failure	
428.22 ICD-9-CM Diagnosis Chronic systolic heart failure	
428.23 ICD-9-CM Diagnosis Acute on chronic systolic heart failure	
428.3 ICD-9-CM Diagnosis Diastolic heart failure	
428.30 ICD-9-CM Diagnosis Unspecified diastolic heart failure	
428.31 ICD-9-CM Diagnosis Acute diastolic heart failure	
428.32 ICD-9-CM Diagnosis Chronic diastolic heart failure	



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
428.4	ICD-9-CM	Diagnosis	Combined systolic and diastolic heart failure
428.40	ICD-9-CM	Diagnosis	Unspecified combined systolic and diastolic heart failure
428.41	ICD-9-CM	Diagnosis	Acute combined systolic and diastolic heart failure
428.42	ICD-9-CM	Diagnosis	Chronic combined systolic and diastolic heart failure
428.43	ICD-9-CM	Diagnosis	Acute on chronic combined systolic and diastolic heart failure
428.9	ICD-9-CM	Diagnosis	Unspecified heart failure
429.0	ICD-9-CM	Diagnosis	Unspecified myocarditis
429.1	ICD-9-CM	Diagnosis	Myocardial degeneration
429.2	ICD-9-CM	Diagnosis	Unspecified cardiovascular disease
429.3	ICD-9-CM	Diagnosis	Cardiomegaly
429.4	ICD-9-CM	Diagnosis	Functional disturbances following cardiac surgery
429.5	ICD-9-CM	Diagnosis	Rupture of chordae tendineae
429.6	ICD-9-CM	Diagnosis	Rupture of papillary muscle
429.7	ICD-9-CM	Diagnosis	Certain sequelae of myocardial infarction, not elsewhere classified
429.71	ICD-9-CM	Diagnosis	Acquired cardiac septal defect
429.79	ICD-9-CM	Diagnosis	Other certain sequelae of myocardial infarction, not elsewhere classified
429.8	ICD-9-CM	Diagnosis	Other ill-defined heart diseases
429.81	ICD-9-CM	Diagnosis	Other disorders of papillary muscle
429.82	ICD-9-CM	Diagnosis	Hyperkinetic heart disease
429.83	ICD-9-CM	Diagnosis	Takotsubo syndrome
429.89	ICD-9-CM	Diagnosis	Other ill-defined heart disease
429.9	ICD-9-CM	Diagnosis	Unspecified heart disease
			Coronary Artery Bypass Surgery
996.03	ICD-9-CM		Mechanical complication due to coronary bypass graft
V45.81		_	Aortocoronary bypass status
36.1	ICD-9-CM	Diagnosis	Bypass Anastomosis For Heart Revascularization
36.12			Bypass Anastomosis For Heart Revascularization
36.15	ICD-9-CM	Procedure	Bypass Anastomosis For Heart Revascularization
36.2	ICD-9-CM	Procedure	Heart Revascularization By Arterial Implant
33510	CPT-4	Procedure	CABG VEIN SINGLE
33511	CPT-4	Procedure	CABG VEIN TWO
33512	CPT-4	Procedure	CABG VEIN THREE
33513	CPT-4	Procedure	CABG VEIN FOUR
33514	CPT-4	Procedure	CABG VEIN FIVE
33516	CPT-4	Procedure	CABG VEIN SIX OR MORE
33517	CPT-4		CABG ARTERY-VEIN SINGLE
33518	CPT-4		CABG ARTERY-VEIN TWO
33519	CPT-4	Procedure	CABG ARTERY-VEIN THREE
33520	CPT-4	Procedure	
33521	CPT-4	Procedure	CABG ARTERY-VEIN FOUR
33522	CPT-4	Procedure	CABG ARTERY-VEIN FIVE
33523	CPT-4	Procedure	CABG ART-VEIN SIX OR MORE



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
33525	CPT-4	Procedure	
			Diabetes Mellitus
250.0		•	Diabetes mellitus without mention of complication
250.01	ICD-9-CM	Diagnosis	Diabetes mellitus without mention of complication, type I [juvenile type], not stated as uncontrolled
250.03	ICD-9-CM	Diagnosis	Diabetes mellitus without mention of complication, type I [juvenile type], uncontrolled
250.00	ICD-9-CM	Diagnosis	Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled
250.02	ICD-9-CM	Diagnosis	Diabetes mellitus without mention of complication, type II or unspecified type, uncontrolled
250.2	ICD-9-CM	Diagnosis	Diabetes with hyperosmolarity
250.21	ICD-9-CM	Diagnosis	Diabetes with hyperosmolarity, type I [juvenile type], not stated as uncontrolled
250.23	ICD-9-CM	Diagnosis	Diabetes with hyperosmolarity, type I [juvenile type], uncontrolled
250.20	ICD-9-CM	Diagnosis	Diabetes with hyperosmolarity, type II or unspecified type, not stated as uncontrolled
250.22	ICD-9-CM	Diagnosis	Diabetes with hyperosmolarity, type II or unspecified type, uncontrolled
250.1	ICD-9-CM	Diagnosis	Diabetes with ketoacidosis
250.11	ICD-9-CM	Diagnosis	Diabetes with ketoacidosis, type I [juvenile type], not stated as uncontrolled
250.13	ICD-9-CM	Diagnosis	Diabetes with ketoacidosis, type I [juvenile type], uncontrolled
250.10	ICD-9-CM	Diagnosis	Diabetes with ketoacidosis, type II or unspecified type, not stated as uncontrolled
250.12	ICD-9-CM	Diagnosis	Diabetes with ketoacidosis, type II or unspecified type, uncontrolled
250.6	ICD-9-CM	Diagnosis	Diabetes with neurological manifestations
250.61	ICD-9-CM	Diagnosis	Diabetes with neurological manifestations, type I [juvenile type], not stated as uncontrolled
250.63	ICD-9-CM	Diagnosis	Diabetes with neurological manifestations, type I [juvenile type], uncontrolled
250.60	ICD-9-CM	Diagnosis	Diabetes with neurological manifestations, type II or unspecified type, not stated
250.62	ICD-9-CM	Diagnosis	Diabetes with neurological manifestations, type II or unspecified type, uncontrolled
250.5	ICD-9-CM	Diagnosis	Diabetes with ophthalmic manifestations
250.51	ICD-9-CM	Diagnosis	Diabetes with ophthalmic manifestations, type I [juvenile type], not stated as uncontrolled
250.53	ICD-9-CM	Diagnosis	Diabetes with ophthalmic manifestations, type I [juvenile type], uncontrolled
250.50	ICD-9-CM	Diagnosis	Diabetes with ophthalmic manifestations, type II or unspecified type, not stated as uncontrolled
250.52	ICD-9-CM	Diagnosis	Diabetes with ophthalmic manifestations, type II or unspecified type, uncontrolled



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
250.3	ICD-9-CM	Diagnosis	Diabetes with other coma
250.31	ICD-9-CM	Diagnosis	Diabetes with other coma, type I [juvenile type], not stated as uncontrolled
250.33	ICD-9-CM	Diagnosis	Diabetes with other coma, type I [juvenile type], uncontrolled
250.30	ICD-9-CM	Diagnosis	Diabetes with other coma, type II or unspecified type, not stated as uncontrolled
250.32	ICD-9-CM	Diagnosis	Diabetes with other coma, type II or unspecified type, uncontrolled
250.8	ICD-9-CM	Diagnosis	Diabetes with other specified manifestations
250.81	ICD-9-CM	Diagnosis	Diabetes with other specified manifestations, type I [juvenile type], not stated as uncontrolled
250.83	ICD-9-CM	Diagnosis	Diabetes with other specified manifestations, type I [juvenile type], uncontrolled
250.80	ICD-9-CM	Diagnosis	Diabetes with other specified manifestations, type II or unspecified type, not stated as uncontrolled
250.82	ICD-9-CM	Diagnosis	Diabetes with other specified manifestations, type II or unspecified type, uncontrolled
250.7	ICD-9-CM	Diagnosis	Diabetes with peripheral circulatory disorders
250.71	ICD-9-CM	Diagnosis	Diabetes with peripheral circulatory disorders, type I [juvenile type], not stated as uncontrolled
250.73	ICD-9-CM	Diagnosis	Diabetes with peripheral circulatory disorders, type I [juvenile type], uncontrolled
250.70	ICD-9-CM	Diagnosis	Diabetes with peripheral circulatory disorders, type II or unspecified type, not stated as uncontrolled
250.72	ICD-9-CM	Diagnosis	Diabetes with peripheral circulatory disorders, type II or unspecified type, uncontrolled
250.4	ICD-9-CM	Diagnosis	Diabetes with renal manifestations
250.41	ICD-9-CM	Diagnosis	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled
250.43	ICD-9-CM	Diagnosis	Diabetes with renal manifestations, type I [juvenile type], uncontrolled
250.40	ICD-9-CM	Diagnosis	Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled
250.42	ICD-9-CM	Diagnosis	Diabetes with renal manifestations, type II or unspecified type, uncontrolled
250.9	ICD-9-CM	Diagnosis	Diabetes with unspecified complication
250.91	ICD-9-CM	Diagnosis	Diabetes with unspecified complication, type I [juvenile type], not stated as uncontrolled
250.93	ICD-9-CM	Diagnosis	Diabetes with unspecified complication, type I [juvenile type], uncontrolled
250.90	ICD-9-CM	Diagnosis	Diabetes with unspecified complication, type II or unspecified type, not stated as uncontrolled
250.92	ICD-9-CM	Diagnosis	Diabetes with unspecified complication, type II or unspecified type, uncontrolled
362.0	ICD-9-CM	Diagnosis	Diabetic retinopathy
362.02	ICD-9-CM	Diagnosis	Diabetic retinopathy



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

•	Code	Code	
Code	Type	Category	Description
366.41	ICD-9-CM	Diagnosis	Diabetic cataract
			Epilepsy Diagnosis
345	ICD-9-CM	Diagnosis	Epilepsy and recurrent seizures
780.3	ICD-9-CM	Diagnosis	Convulsions
780.31	ICD-9-CM	Diagnosis	Febrile convulsions (simple), unspecified
780.32	ICD-9-CM	Diagnosis	Complex febrile convulsions
780.33	ICD-9-CM	Diagnosis	Post traumatic seizures
780.39	ICD-9-CM	Diagnosis	Other convulsions
			Hospitalized Intracranial Bleed
430	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage
431	ICD-9-CM	Diagnosis	Intracerebral hemorrhage
432.0	ICD-9-CM	Diagnosis	Nontraumatic extradural hemorrhage
432.1	ICD-9-CM	Diagnosis	Subdural hemorrhage
432.9	ICD-9-CM	Diagnosis	Unspecified intracranial hemorrhage
852.0	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury without mention of open intracranial wound
852.1	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound
852.2	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury without mention of open intracranial wound
852.20	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness
852.21	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, no loss of consciousness
852.22	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, brief (less than one hour) loss of consciousness
852.23	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness
852.24	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
852.25	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
852.26	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, loss of consciousness of unspecified duration
852.29	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, without mention of open intracranial wound, unspecified concussion
852.3	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound
852.4	ICD-9-CM	_	Extradural hemorrhage following injury without mention of open intracranial wound
852.40	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
852.41	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial
			wound, no loss of consciousness
852.42	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial
			wound, brief (less than 1 hour) loss of consciousness
852.43	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial
			wound, moderate (1-24 hours) loss of consciousness
852.44	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial
			wound, prolonged (more than 24 hours) loss of consciousness and return to pre-
			existing conscious level
852.45	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial
			wound, prolonged (more than 24 hours) loss of consciousness, without return to
			pre-existing conscious level
852.46	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial
			wound, loss of consciousness of unspecified duration
852.49	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, without mention of open intracranial
052.5	165.0.614	Di	wound, unspecified concussion
852.5	ICD-9-CM	_	Extradural hemorrhage following injury with open intracranial wound
853.00	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, unspecified state of consciousness
853.01	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, without mention
033.01	ICD 5 CIVI	Diagnosis	of open intracranial wound, no loss of consciousness
853.02	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, without mention
		. 0	of open intracranial wound, brief (less than 1 hour) loss of consciousness
853.03	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, without mention
			of open intracranial wound, moderate (1-24 hours) loss of consciousness
853.04	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, without mention
			of open intracranial wound, prolonged (more than 24 hours) loss of consciousness
			and return to preexisting conscious level
853.05	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury. Without mention
			of open intracranial wound, prolonged (more than 24 hours) loss of consciousness,
			without return to pre-existing conscious level
853.06	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, without mention
			of open intracranial wound, loss of consciousness of unspecified duration
053.00	100 0 004	Dia == '	Other and managified interesponded because the filler the light with the state of t
853.09	ICD-9-CIVI	Diagnosis	Other and unspecified intracranial hemorrhage following injury, without mention of open intracranial wound, unspecified concussion
			Hyperlipidemia
272.0	ICD-9-CM	Diagnosis	Pure hypercholesterolemia
272.0		Diagnosis	Pure hypereriolesteroienna Pure hyperglyceridemia
272.2		_	Mixed hyperlipidemia
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Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
272.3	ICD-9-CM	Diagnosis	Hyperchylomicronemia
			Hypertension
401.0	ICD-9-CM	Diagnosis	Essential hypertension, malignant
401.1	ICD-9-CM	Diagnosis	Essential hypertension, benign
401.9	ICD-9-CM	Diagnosis	Unspecified essential hypertension
402.0	ICD-9-CM	Diagnosis	Malignant hypertensive heart disease
402.00	ICD-9-CM	Diagnosis	Malignant hypertensive heart disease without heart failure
402.01	ICD-9-CM	Diagnosis	Malignant hypertensive heart disease with heart failure
402.1	ICD-9-CM	Diagnosis	Benign hypertensive heart disease
402.10	ICD-9-CM	Diagnosis	Benign hypertensive heart disease without heart failure
402.11	ICD-9-CM	Diagnosis	Benign hypertensive heart disease with heart failure
402.9	ICD-9-CM	Diagnosis	Unspecified hypertensive heart disease
402.90	ICD-9-CM	Diagnosis	Unspecified hypertensive heart disease without heart failure
402.91	ICD-9-CM	Diagnosis	Hypertensive heart disease, unspecified, with heart failure
403.0	ICD-9-CM	Diagnosis	Hypertensive chronic kidney disease, malignant
403.00	ICD-9-CM	Diagnosis	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage I through stage IV, or unspecified
403.01	ICD-9-CM	Diagnosis	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage V or end stage renal disease
403.1	ICD-9-CM	Diagnosis	Hypertensive chronic kidney disease, benign
403.10	ICD-9-CM	Diagnosis	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage I
			through stage IV, or unspecified
403.11	ICD-9-CM	Diagnosis	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage V or end stage renal disease
403.9	ICD-9-CM	Diagnosis	Hypertensive chronic kidney disease, unspecified
403.90	ICD-9-CM	Diagnosis	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified
403.91	ICD-9-CM	Diagnosis	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage V or end stage renal disease
404.0	ICD-9-CM	Diagnosis	Hypertensive heart and chronic kidney disease, malignant
404.00		_	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified
404.01	ICD-9-CM	Diagnosis	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified
404.02	ICD-9-CM	Diagnosis	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage V or end stage renal disease
404.03	ICD-9-CM	Diagnosis	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease
404.1	ICD-9-CM	Diagnosis	Hypertensive heart and chronic kidney disease, benign



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
404.10	ICD-9-CM	Diagnosis	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified
404.11	ICD-9-CM	Diagnosis	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified
404.12	ICD-9-CM	Diagnosis	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage V or end stage renal disease
404.13	ICD-9-CM	Diagnosis	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease
404.9	ICD-9-CM	Diagnosis	Hypertensive heart and chronic kidney disease, unspecified
404.90	ICD-9-CM	Diagnosis	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified
404.91	ICD-9-CM	Diagnosis	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified
404.92	ICD-9-CM	Diagnosis	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage V or end stage renal disease
404.93	ICD-9-CM	Diagnosis	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease
405.0	ICD-9-CM	Diagnosis	Secondary hypertension, malignant
405.01	ICD-9-CM	Diagnosis	Secondary renovascular hypertension, malignant
405.09	ICD-9-CM	Diagnosis	Other secondary hypertension, malignant
405.1	ICD-9-CM	Diagnosis	Secondary hypertension, benign
405.11	ICD-9-CM	Diagnosis	Secondary renovascular hypertension, benign
405.19	ICD-9-CM	Diagnosis	Other secondary hypertension, benign
405.9	ICD-9-CM	Diagnosis	Unspecified secondary hypertension, unspecified
405.91	ICD-9-CM	Diagnosis	Secondary renovascular hypertension, unspecified
405.99	ICD-9-CM	Diagnosis	Other secondary hypertension, unspecified
4050F	CPT-4	Procedure	Hypertension plan of care documented as appropriate
			Major Surgery
V67.0	ICD-9-CM	Diagnosis	Surgery follow-up examination
V67.1	ICD-9-CM	Diagnosis	Radiotherapy follow-up examination
V67.2	ICD-9-CM	Diagnosis	Chemotherapy follow-up examination
V67.3	ICD-9-CM	Diagnosis	Psychotherapy and other treatment for mental disorder follow-up examination
V67.4	ICD-9-CM	_	Treatment of healed fracture follow-up examination
V67.5	ICD-9-CM	J	·
V67.6	ICD-9-CM	_	Combined treatment follow-up examination
V67.9	ICD-9-CM	Diagnosis	Unspecified follow-up examination



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code
Code	Туре	Category Description
50010 - 50045	CPT-4	Procedure Major Surgery
50070 - 50100	CPT-4	Procedure Major Surgery
50107 - 50123	CPT-4	Procedure Major Surgery
50124 - 50135	CPT-4	Procedure Major Surgery
50205	CPT-4	Procedure Major Surgery
50290 - 50320	CPT-4	Procedure Major Surgery
50321 - 50340	CPT-4	Procedure Major Surgery
50370	CPT-4	Procedure Major Surgery
50382 - 50384	CPT-4	Procedure Major Surgery
50400	CPT-4	Procedure Major Surgery
50414 - 50413	CPT-4	Procedure Major Surgery
50415 - 50540		Procedure Major Surgery
50593	CPT-4	Procedure Major Surgery
50600 - 50630		Procedure Major Surgery
50650 - 50660	CPT-4	Procedure Major Surgery
50700 - 50940	CPT-4	Procedure Major Surgery
51020 - 51040	CPT-4	Procedure Major Surgery
51080	CPT-4	Procedure Major Surgery
53000 - 53085	CPT-4	Procedure Major Surgery
53210 - 53275	CPT-4	Procedure Major Surgery
53400 - 53520	CPT-4	Procedure Major Surgery
53855	CPT-4	Procedure Major Surgery
56620 - 56740	CPT-4	Procedure Major Surgery
56800 - 56810	CPT-4	Procedure Major Surgery
57000 - 57335	CPT-4	Procedure Major Surgery
57530 - 57556		Procedure Major Surgery
57720	CPT-4	Procedure Major Surgery
58140 - 58294		Procedure Major Surgery
58400 - 58540		Procedure Major Surgery
58600 - 58615	CPT-4	Procedure Major Surgery
58700 - 58770		Procedure Major Surgery
58820 - 58825		Procedure Major Surgery
58920 - 58960		Procedure Major Surgery
58999	CPT-4	Procedure Major Surgery
43644	CPT-4	Procedure Major Surgery
43645	CPT-4	Procedure Major Surgery
43800 - 43881		Procedure Major Surgery
49570 - 49575		Procedure Major Surgery
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Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
61320 - 61710	CPT-4	Procedure	Major Surgery
62160 - 61266	CPT-4	Procedure	Major Surgery
01214	CPT-4	Procedure	Major Surgery
01215	CPT-4	Procedure	Major Surgery
01402	CPT-4	Procedure	Major Surgery
27130 - 27138	CPT-4	Procedure	Major Surgery
27447	CPT-4	Procedure	Major Surgery
27486	CPT-4	Procedure	Major Surgery
27487	CPT-4	Procedure	Major Surgery
27075 - 27079	CPT-4	Procedure	Major Surgery
27218	CPT-4	Procedure	Major Surgery
27226 - 27228	CPT-4	Procedure	Major Surgery
27253	CPT-4	Procedure	Major Surgery
27258	CPT-4	Procedure	Major Surgery
27259	CPT-4	Procedure	Major Surgery
27299	CPT-4	Procedure	Major Surgery
29861 - 29863	CPT-4	Procedure	Major Surgery
00.76	ICD-9-CM	Diagnosis	Hip bearing surface, ceramic-on-ceramic
00.77	ICD-9-CM	Diagnosis	Hip bearing surface, ceramic-on-polyethylene
00.75	ICD-9-CM	Diagnosis	Hip bearing surface, metal-on-metal
00.74	ICD-9-CM	Diagnosis	Hip bearing surface, metal-on-polyethylene
00.71	ICD-9-CM	Diagnosis	Revision of hip replacement, acetabular component
00.73	ICD-9-CM	Diagnosis	Revision of hip replacement, acetabular liner and/or femoral head only
00.70	ICD-9-CM	Diagnosis	Revision of hip replacement, both acetabular and femoral components
00.72	ICD-9-CM	Diagnosis	Revision of hip replacement, femoral component
8.00	ICD-9-CM	Procedure	Other knee and hip procedures
00.81	ICD-9-CM	Procedure	Procedures and Interventions, Not Elsewhere Classified
00.82	ICD-9-CM	Procedure	Procedures and Interventions, Not Elsewhere Classified
00.83	ICD-9-CM	Procedure	Procedures and Interventions, Not Elsewhere Classified
00.84	ICD-9-CM	Procedure	Procedures and Interventions, Not Elsewhere Classified



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
00.85	ICD-9-CM	Procedure	Procedures and Interventions, Not Elsewhere Classified
00.86	ICD-9-CM	Procedure	Procedures and Interventions, Not Elsewhere Classified
00.87	ICD-9-CM	Procedure	Procedures and Interventions, Not Elsewhere Classified
79.85	ICD-9-CM	Procedure	Open reduction of dislocation of hip
79.86	ICD-9-CM	Procedure	Open reduction of dislocation of knee
80.45	ICD-9-CM	Procedure	Division of joint capsule, ligament, or cartilage of hip
80.46	ICD-9-CM	Procedure	Division of joint capsule, ligament, or cartilage of knee
80.6	ICD-9-CM	Procedure	Excision of semilunar cartilage of knee
80.85	ICD-9-CM	Procedure	Other local excision or destruction of lesion of hip joint
80.86	ICD-9-CM	Procedure	Other local excision or destruction of lesion of knee joint
80.95	ICD-9-CM	Procedure	Other excision of hip joint
80.96	ICD-9-CM	Procedure	Other excision of knee joint
81.40	ICD-9-CM	Procedure	Repair of hip, not elsewhere classified
81.42	ICD-9-CM	Procedure	Five-in-one repair of knee
81.52	ICD-9-CM	Procedure	Partial hip replacement
81.53	ICD-9-CM	Procedure	Revision of hip replacement, not otherwise specified
81.55	ICD-9-CM	Procedure	Revision of knee replacement, not otherwise specified
81.51	ICD-9-CM	Procedure	Total hip replacement
81.54	ICD-9-CM	Procedure	Total knee replacement
81.43	ICD-9-CM	Procedure	Triad knee repair
84.16	ICD-9-CM	Procedure	Disarticulation of knee
84.18	ICD-9-CM	Procedure	Disarticulation of hip
20930 - 22865	CPT-4	Procedure	Major Surgery
63001 - 63688	CPT-4	Procedure	Major Surgery
00.34	ICD-9-CM	Procedure	Imageless computer assisted surgery
00.35	ICD-9-CM	Procedure	Computer assisted surgery with multiple datasets
00.39	ICD-9-CM	Procedure	Other computer assisted surgery



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

-	Code	Code	
Code	Type	Category	Description
Couc	1,460	category	Metastatic Cancer
196.0	ICD-9-CM	Diagnosis	Secondary and unspecified malignant neoplasm of lymph nodes of head, face, and
		J	neck
196.1	ICD-9-CM	Diagnosis	Secondary and unspecified malignant neoplasm of intrathoracic lymph nodes
		_	
196.2	ICD-9-CM	Diagnosis	Secondary and unspecified malignant neoplasm of intra-abdominal lymph nodes
196.3	ICD-9-CM	Diagnosis	Secondary and unspecified malignant neoplasm of lymph nodes of axilla and upper
			limb
196.5	ICD-9-CM	Diagnosis	Secondary and unspecified malignant neoplasm of lymph nodes of inguinal region
			and lower limb
196.6	ICD-9-CM	_	Secondary and unspecified malignant neoplasm of intrapelvic lymph nodes
196.8	ICD-9-CM	Diagnosis	Secondary and unspecified malignant neoplasm of lymph nodes of multiple sites
196.9	ICD-9-CM	Diagnosis	Secondary and unspecified malignant neoplasm of lymph nodes, site unspecified
107.0	100 0 014	Dia ana a sia	Constitution of the contract o
197.0	ICD-9-CM		Secondary malignant neoplasm of lung
197.1	ICD-9-CM	_	Secondary malignant neoplasm of mediastinum
197.2	ICD-9-CM	_	Secondary malignant neoplasm of pleura
197.3	ICD-9-CM	•	Secondary malignant neoplasm of other respiratory organs
197.4	ICD-9-CM	_	Secondary malignant neoplasm of small intestine including duodenum
197.5	ICD-9-CM		Secondary malignant neoplasm of large intestine and rectum
197.6	ICD-9-CM	_	Secondary malignant neoplasm of retroperitoneum and peritoneum
197.7	ICD-9-CM	_	Secondary malignant neoplasm of liver
197.8	ICD-9-CM		Secondary malignant neoplasm of other digestive organs and spleen
198.0	ICD-9-CM		Secondary malignant neoplasm of kidney
198.1	ICD-9-CM	_	Secondary malignant neoplasm of other urinary organs
198.2	ICD-9-CM	Diagnosis	Secondary malignant neoplasm of skin
198.3	ICD-9-CM	Diagnosis	Secondary malignant neoplasm of brain and spinal cord
198.4	ICD-9-CM	Diagnosis	Secondary malignant neoplasm of other parts of nervous system
198.5	ICD-9-CM	Diagnosis	Secondary malignant neoplasm of bone and bone marrow
198.6	ICD-9-CM	Diagnosis	Secondary malignant neoplasm of ovary
198.7	ICD-9-CM	Diagnosis	Secondary malignant neoplasm of adrenal gland
198.8	ICD-9-CM	Diagnosis	Secondary malignant neoplasm of other specified sites
198.81	ICD-9-CM	Diagnosis	Secondary malignant neoplasm of breast
198.82	ICD-9-CM	Diagnosis	Secondary malignant neoplasm of genital organs
198.89	ICD-9-CM	Diagnosis	Secondary malignant neoplasm of other specified sites
199.0	ICD-9-CM	Diagnosis	Disseminated malignant neoplasm
199.1	ICD-9-CM	Diagnosis	Other malignant neoplasm of unspecified site
199.2	ICD-9-CM	Diagnosis	Malignant neoplasm associated with transplanted organ



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
	,,	<u> </u>	Peripheral Vascular Disease
440	ICD-9-CM	Diagnosis	Atherosclerosis
440.0	ICD-9-CM	Diagnosis	Atherosclerosis of aorta
440.1	ICD-9-CM	Diagnosis	Atherosclerosis of renal artery
440.2	ICD-9-CM	Diagnosis	Atherosclerosis of native arteries of the extremities
440.20	ICD-9-CM	Diagnosis	Atherosclerosis of native arteries of the extremities, unspecified
440.21	ICD-9-CM	Diagnosis	Atherosclerosis of native arteries of the extremities with intermittent claudication
440.22		_	Atherosclerosis of native arteries of the extremities with rest pain
440.23		_	Atherosclerosis of native arteries of the extremities with ulceration
440.24		_	Atherosclerosis of native arteries of the extremities with gangrene
440.29	ICD-9-CM	•	Other atherosclerosis of native arteries of the extremities
440.3		_	Atherosclerosis of bypass graft of extremities
440.30	ICD-9-CM	Diagnosis	Atherosclerosis of unspecified bypass graft of extremities
440.31	ICD-9-CM	Diagnosis	Atherosclerosis of autologous vein bypass graft of extremities
440.32	ICD-9-CM	Diagnosis	Atherosclerosis of nonautologous biological bypass graft of extremities
440.4	ICD-9-CM	Diagnosis	Chronic total occlusion of artery of the extremities
440.8	ICD-9-CM	Diagnosis	Atherosclerosis of other specified arteries
440.9	ICD-9-CM	Diagnosis	Generalized and unspecified atherosclerosis
441.2	ICD-9-CM	Diagnosis	Thoracic aneurysm without mention of rupture
441.4	ICD-9-CM	Diagnosis	Abdominal aneurysm without mention of rupture
441.7	ICD-9-CM	Diagnosis	Thoracoabdominal aneurysm, without mention of rupture
441.9	ICD-9-CM	Diagnosis	Aortic aneurysm of unspecified site without mention of rupture
443.1	ICD-9-CM	Diagnosis	Thromboangiitis obliterans [Buerger's disease]
443.2	ICD-9-CM	Diagnosis	Other arterial dissection
443.21	ICD-9-CM	Diagnosis	Dissection of carotid artery
443.22	ICD-9-CM	Diagnosis	Dissection of iliac artery
443.23	ICD-9-CM	Diagnosis	Dissection of renal artery
443.24	ICD-9-CM	Diagnosis	Dissection of vertebral artery
443.29	ICD-9-CM	Diagnosis	Dissection of other artery
443.8	ICD-9-CM	Diagnosis	Other specified peripheral vascular diseases
443.81	ICD-9-CM	Diagnosis	Peripheral angiopathy in diseases classified elsewhere
443.82	ICD-9-CM	Diagnosis	Erythromelalgia
443.89	ICD-9-CM	Diagnosis	Other peripheral vascular disease
443.9	ICD-9-CM	Diagnosis	Peripheral vascular disease, unspecified
447.1	ICD-9-CM	_	Stricture of artery
557.1	ICD-9-CM	_	Chronic vascular insufficiency of intestine
557.9		_	Unspecified vascular insufficiency of intestine
V434	ICD-9-CM	•	Blood vessel replaced by other means
38.10	ICD-9-CM	_	Endarterectomy, unspecified site
35454	CPT-4		Transluminal balloon angioplasty, open; iliac
35456	CPT-4		Transluminal balloon angioplasty, open; femoral-popliteal
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Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code
Code	Type	Category Description
35459	CPT-4	Procedure Transluminal balloon angioplasty, open; tibioperoneal trunk and branches
35470	CPT-4	Procedure Transluminal balloon angioplasty, percutaneous; tibioperoneal trunk or branches, each vessel
35473	CPT-4	Procedure Transluminal balloon angioplasty, percutaneous; iliac
35474	CPT-4	Procedure Transluminal balloon angioplasty, percutaneous; femoral-popliteal
35482	CPT-4	Procedure Transluminal peripheral atherectomy, open; iliac
35483	CPT-4	Procedure Transluminal peripheral atherectomy, open; femoral-popliteal
35492	CPT-4	Procedure Transluminal peripheral atherectomy, percutaneous; iliac
35493	CPT-4	Procedure Transluminal peripheral atherectomy, percutaneous; femoral-popliteal
35495	CPT-4	Procedure Transluminal peripheral atherectomy, percutaneous; tibioperoneal trunk and branches
37207	CPT-4	Procedure Transcatheter placement of an intravascular stent(s) (except coronary, carotid, vertebral, iliac and lower extremity arteries), open; initial vessel
37208	CPT-4	Procedure Transcatheter placement of an intravascular stent(s) (except coronary, carotid, vertebral, iliac and lower extremity arteries), open; each additional vessel (List separately in addition to code for primary procedure)
37220	CPT-4	Procedure Revascularization, endovascular, open or percutaneous, iliac artery, unilateral, initial vessel; with transluminal angioplasty
37221	CPT-4	Procedure Revascularization, endovascular, open or percutaneous, iliac artery, unilateral, initial vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed
37222	CPT-4	Procedure Revascularization, endovascular, open or percutaneous, iliac artery, each additional ipsilateral iliac vessel; with transluminal angioplasty (List separately in addition to code for primary procedure)
37223	CPT-4	Procedure Revascularization, endovascular, open or percutaneous, iliac artery, each additional ipsilateral iliac vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed (List separately in addition to code for primary procedure)
37224	CPT-4	Procedure Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with transluminal angioplasty
37225	CPT-4	Procedure Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with atherectomy, includes angioplasty within the same vessel, when performed
37226	CPT-4	Procedure Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed
37227	CPT-4	Procedure Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed
37228	CPT-4	Procedure Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with transluminal angioplasty



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

Code	Code	
Туре	Category	Description
CPT-4	Procedure	Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with atherectomy, includes angioplasty within the same vessel, when performed
CPT-4	Procedure	Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed
CPT-4	Procedure	Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed
CPT-4	Procedure	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with transluminal angioplasty (List separately in addition to code for primary procedure)
CPT-4	Procedure	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with atherectomy, includes angioplasty within the same vessel, when performed (List separately in addition to code for primary procedure)
CPT-4	Procedure	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed (List separately in addition to
CPT-4	Procedure	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, each additional vessel; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed (List separately in addition to code for primary procedure)
ICD-9-CM	Procedure	Aortic-iliac-femoral bypass
		Other (peripheral) vascular shunt or bypass
CPT-4		Thromboendarterectomy, including patch graft, if performed; iliac
CPT-4	Procedure	Thromboendarterectomy, including patch graft, if performed; iliofemoral
CPT-4	Procedure	Thromboendarterectomy, including patch graft, if performed; combined aortoiliac
CPT-4	Procedure	Thromboendarterectomy, including patch graft, if performed; combined aortoiliofemoral
CPT-4	Procedure	Thromboendarterectomy, including patch graft, if performed; common femoral
CPT-4	Procedure	Thromboendarterectomy, including patch graft, if performed; deep (profunda) femoral
CPT-4	Procedure	Bypass graft, with vein; axillary-femoral
CPT-4	Procedure	Bypass graft, with vein; axillary-femoral-femoral
CPT-4	Procedure	Bypass graft, with vein; aortoiliac or bi-iliac
CPT-4	Procedure	Bypass graft, with vein; aortofemoral or bifemoral
CPT-4	Procedure	Bypass graft, with vein; aortoiliofemoral, unilateral
	Type CPT-4 CPT-4	Type Category CPT-4 Procedure CPT-4 Procedure



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code
Code	Туре	Category Description
35549	CPT-4	Procedure Bypass graft, with vein; aortoiliofemoral, bilateral
35551	CPT-4	Procedure Bypass graft, with vein; aortofemoral-popliteal
35556	CPT-4	Procedure Bypass graft, with vein; femoral-popliteal
35558	CPT-4	Procedure Bypass graft, with vein; femoral-femoral
35563	CPT-4	Procedure Bypass graft, with vein; ilioiliac
35565	CPT-4	Procedure Bypass graft, with vein; iliofemoral
35566	CPT-4	Procedure Bypass graft, with vein; femoral-anterior tibial, posterior tibial, peroneal artery or other distal vessels
35570	CPT-4	Procedure Bypass graft, with vein; tibial-tibial, peroneal-tibial, or tibial/peroneal trunk-tibial
35571	CPT-4	Procedure Bypass graft, with vein; popliteal-tibial, -peroneal artery or other distal vessels
35681	CPT-4	Procedure Bypass graft; composite, prosthetic and vein (List separately in addition to code fo primary procedure)
35682	CPT-4	Procedure Bypass graft; autogenous composite, 2 segments of veins from 2 locations (List separately in addition to code for primary procedure)
35683	CPT-4	Procedure Bypass graft; autogenous composite, 3 or more segments of vein from 2 or more locations (List separately in addition to code for primary procedure)
35879	CPT-4	Procedure Revision, lower extremity arterial bypass, without thrombectomy, open; with vein patch angioplasty
84.10	ICD-9-CM	Procedure Lower limb amputation, not otherwise specified
84.11	ICD-9-CM	Procedure Amputation of toe
84.12	ICD-9-CM	Procedure Amputation through foot
84.13	ICD-9-CM	Procedure Disarticulation of ankle
84.14	ICD-9-CM	Procedure Amputation of ankle through malleoli of tibia and fibula
84.15	ICD-9-CM	Procedure Other amputation below knee
84.16	ICD-9-CM	Procedure Disarticulation of knee
84.17	ICD-9-CM	Procedure Amputation above knee
27295	CPT-4	Procedure Disarticulation of hip
27590	CPT-4	Procedure Amputation, thigh, through femur, any level;
27591	CPT-4	Procedure Amputation, thigh, through femur, any level; immediate fitting technique including first cast
27592	CPT-4	Procedure Amputation, thigh, through femur, any level; open, circular (guillotine)
27598	CPT-4	Procedure Disarticulation at knee
27880	CPT-4	Procedure Amputation, leg, through tibia and fibula;
27881	CPT-4	Procedure Amputation, leg, through tibia and fibula; with immediate fitting technique including application of first cast
27882	CPT-4	Procedure Amputation, leg, through tibia and fibula; open, circular (guillotine)
27888	CPT-4	Procedure Amputation, ankle, through malleoli of tibia and fibula (eg, Syme, Pirogoff type procedures), with plastic closure and resection of nerves
27889	CPT-4	Procedure Ankle disarticulation
28800	CPT-4	Procedure Amputation, foot; midtarsal (eg, Chopart type procedure)



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
28805	CPT-4		Amputation, foot; transmetatarsal
28810	CPT-4		Amputation, metatarsal, with toe, single
28820	CPT-4		Amputation, toe; metatarsophalangeal joint
28825	CPT-4	Procedure	Amputation, toe; interphalangeal joint Trauma with Likely Immobilization
800	ICD-9-CM	Diagnosis	Fracture of vault of skull
801	ICD-9-CM	Ü	Fracture of base of skull
802		Ü	Fracture of face bones
803		_	Other and unqualified skull fractures
		_	
804		_	Multiple fractures involving skull or face with other bones
800.0	ICD-9-CM	_	Closed fracture of vault of skull without mention of intracranial injury
800.00	ICD-9-CM	Diagnosis	Closed fracture of vault of skull without mention of intracranial injury, unspecified state of consciousness
800.01	ICD-9-CM	Diagnosis	Closed fracture of vault of skull without mention of intracranial injury, no loss of consciousness
800.02	ICD-9-CM	Diagnosis	Closed fracture of vault of skull without mention of intracranial injury, brief (less than one hour) loss of consciousness
800.03	ICD-9-CM	Diagnosis	Closed fracture of vault of skull without mention of intracranial injury, moderate (1-24 hours) loss of consciousness
800.04	ICD-9-CM	Diagnosis	Closed fracture of vault of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
800.05	ICD-9-CM	Diagnosis	Closed fracture of vault of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
800.06	ICD-9-CM	Diagnosis	Closed fracture of vault of skull without mention of intracranial injury, loss of consciousness of unspecified duration
800.09	ICD-9-CM	Diagnosis	Closed fracture of vault of skull without mention of intracranial injury, unspecified concussion
800.1	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with cerebral laceration and contusion
800.10	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with cerebral laceration and contusion, unspecified state of consciousness
800.11	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with cerebral laceration and contusion, no loss of consciousness
800.12	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with cerebral laceration and contusion, brief (less than one hour) loss of consciousness
800.13	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness
800.14	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
800.15	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
800.16	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with cerebral laceration and contusion, loss of consciousness of unspecified duration
800.19	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with cerebral laceration and contusion, unspecified concussion
800.2	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage
800.20	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness
800.21	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness
800.22	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness
800.23	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness
800.24	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
800.25	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
800.26	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration
800.29	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion
800.3	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with other and unspecified intracranial
800.30	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, unspecified state of consciousness
800.31	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, no loss of consciousness
800.32	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness
800.33	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness
800.34	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
800.35	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
800.36	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration
800.39	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with other and unspecified intracranial hemorrhage, unspecified concussion
800.4	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with intercranial injury of other and unspecified
800.40	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, unspecified state of consciousness
800.41	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, no loss of consciousness
800.42	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness
800.43	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness
800.44	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
800.45	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
800.46	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration
800.49	ICD-9-CM	Diagnosis	Closed fracture of vault of skull with intracranial injury of other and unspecified nature, unspecified concussion
800.5	ICD-9-CM	Diagnosis	Open fracture of vault of skull without mention of intracranial injury
800.50	ICD-9-CM	Diagnosis	Open fracture of vault of skull without mention of intracranial injury, unspecified state of consciousness
800.51	ICD-9-CM	Diagnosis	Open fracture of vault of skull without mention of intracranial injury, no loss of consciousness
800.52	ICD-9-CM	Diagnosis	Open fracture of vault of skull without mention of intracranial injury, brief (less than one hour) loss of consciousness
800.53	ICD-9-CM	Diagnosis	Open fracture of vault of skull without mention of intracranial injury, moderate (1-24 hours) loss of consciousness
800.54	ICD-9-CM	Diagnosis	Open fracture of vault of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
800.55	ICD-9-CM	Diagnosis	Open fracture of vault of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
800.56	ICD-9-CM	Diagnosis	Open fracture of vault of skull without mention of intracranial injury, loss of consciousness of unspecified duration
800.59	ICD-9-CM	Diagnosis	Open fracture of vault of skull without mention of intracranial injury, unspecified concussion



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

Code	Code Type	Code Category	Description
800.6	ICD-9-CM		Open fracture of vault of skull with cerebral laceration and contusion
800.60	ICD-9-CM	Diagnosis	Open fracture of vault of skull with cerebral laceration and contusion, unspecified state of consciousness
800.61	ICD-9-CM	Diagnosis	Open fracture of vault of skull with cerebral laceration and contusion, no loss of consciousness
800.62	ICD-9-CM	Diagnosis	Open fracture of vault of skull with cerebral laceration and contusion, brief (less than one hour) loss of consciousness
800.63	ICD-9-CM	Diagnosis	Open fracture of vault of skull with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness
800.64	ICD-9-CM	Diagnosis	Open fracture of vault of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
800.65	ICD-9-CM	Diagnosis	Open fracture of vault of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
800.66	ICD-9-CM	Diagnosis	Open fracture of vault of skull with cerebral laceration and contusion, loss of consciousness of unspecified duration
800.69	ICD-9-CM	Diagnosis	Open fracture of vault of skull with cerebral laceration and contusion, unspecified concussion
800.7	ICD-9-CM	Diagnosis	Open fracture of vault of skull with subarachnoid, subdural, and extradural
800.70	ICD-9-CM	Diagnosis	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness
800.71	ICD-9-CM	Diagnosis	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness
800.72	ICD-9-CM	Diagnosis	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness
800.73	ICD-9-CM	Diagnosis	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness
800.74	ICD-9-CM	Diagnosis	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
800.75	ICD-9-CM	Diagnosis	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
800.76	ICD-9-CM	Diagnosis	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration
800.79	ICD-9-CM	Diagnosis	Open fracture of vault of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion
8.008	ICD-9-CM	Diagnosis	Open fracture of vault of skull with other and unspecified intracranial hemorrhage
800.80	ICD-9-CM	Diagnosis	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, unspecified state of consciousness



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
800.81	ICD-9-CM	Diagnosis	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, no loss of consciousness
800.82	ICD-9-CM	Diagnosis	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness
800.83	ICD-9-CM	Diagnosis	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness
800.84	ICD-9-CM	Diagnosis	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
800.85	ICD-9-CM	Diagnosis	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
800.86	ICD-9-CM	Diagnosis	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration
800.89	ICD-9-CM	Diagnosis	Open fracture of vault of skull with other and unspecified intracranial hemorrhage, unspecified concussion
800.9	ICD-9-CM	Diagnosis	Open fracture of vault of skull with intracranial injury of other and unspecified
800.90	ICD-9-CM	Diagnosis	Open fracture of vault of skull with intracranial injury of other and unspecified nature, unspecified state of consciousness
800.91	ICD-9-CM	Diagnosis	Open fracture of vault of skull with intracranial injury of other and unspecified nature, no loss of consciousness
800.92	ICD-9-CM	Diagnosis	Open fracture of vault of skull with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness
800.93	ICD-9-CM	Diagnosis	Open fracture of vault of skull with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness
800.94	ICD-9-CM	Diagnosis	Open fracture of vault of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
800.95	ICD-9-CM	Diagnosis	Open fracture of vault of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
800.96	ICD-9-CM	Diagnosis	Open fracture of vault of skull with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration
800.99	ICD-9-CM	Diagnosis	Open fracture of vault of skull with intracranial injury of other and unspecified nature, unspecified concussion
801.0	ICD-9-CM	Diagnosis	Closed fracture of base of skull without mention of intracranial injury
801.00	ICD-9-CM	Diagnosis	Closed fracture of base of skull without mention of intracranial injury, unspecified state of consciousness
801.01	ICD-9-CM	Diagnosis	Closed fracture of base of skull without mention of intracranial injury, no loss of consciousness



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
801.02	ICD-9-CM	Diagnosis	Closed fracture of base of skull without mention of intracranial injury, brief (less than one hour) loss of consciousness
801.03	ICD-9-CM	Diagnosis	Closed fracture of base of skull without mention of intracranial injury, moderate (1-24 hours) loss of consciousness
801.04	ICD-9-CM	Diagnosis	Closed fracture of base of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
801.05	ICD-9-CM	Diagnosis	Closed fracture of base of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
801.06	ICD-9-CM	Diagnosis	Closed fracture of base of skull without mention of intracranial injury, loss of consciousness of unspecified duration
801.09	ICD-9-CM	Diagnosis	Closed fracture of base of skull without mention of intracranial injury, unspecified concussion
801.1	ICD-9-CM	Diagnosis	Closed fracture of base of skull with cerebral laceration and contusion
801.10	ICD-9-CM	Diagnosis	Closed fracture of base of skull with cerebral laceration and contusion, unspecified state of consciousness
801.11	ICD-9-CM	Diagnosis	Closed fracture of base of skull with cerebral laceration and contusion, no loss of consciousness
801.12	ICD-9-CM	Diagnosis	Closed fracture of base of skull with cerebral laceration and contusion, brief (less than one hour) loss of consciousness
801.13	ICD-9-CM	Diagnosis	Closed fracture of base of skull with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness
801.14	ICD-9-CM	Diagnosis	Closed fracture of base of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
801.15	ICD-9-CM	Diagnosis	Closed fracture of base of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
801.16	ICD-9-CM	Diagnosis	Closed fracture of base of skull with cerebral laceration and contusion, loss of consciousness of unspecified duration
801.19	ICD-9-CM	Diagnosis	Closed fracture of base of skull with cerebral laceration and contusion, unspecified concussion
801.2	ICD-9-CM	Diagnosis	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage
801.20	ICD-9-CM	Diagnosis	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness
801.21	ICD-9-CM	Diagnosis	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness
801.22	ICD-9-CM	Diagnosis	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
801.23	ICD-9-CM	Diagnosis	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness
801.24	ICD-9-CM	Diagnosis	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
801.25	ICD-9-CM	Diagnosis	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
801.26	ICD-9-CM	Diagnosis	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration
801.29	ICD-9-CM	Diagnosis	Closed fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion
801.3	ICD-9-CM	Diagnosis	Closed fracture of base of skull with other and unspecified intracranial hemorrhage
801.30	ICD-9-CM	Diagnosis	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, unspecified state of consciousness
801.31	ICD-9-CM	Diagnosis	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, no loss of consciousness
801.32	ICD-9-CM	Diagnosis	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness
801.33	ICD-9-CM	Diagnosis	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness
801.34	ICD-9-CM	Diagnosis	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
801.35	ICD-9-CM	Diagnosis	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
801.36	ICD-9-CM	Diagnosis	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration
801.39	ICD-9-CM	Diagnosis	Closed fracture of base of skull with other and unspecified intracranial hemorrhage, unspecified concussion
801.4	ICD-9-CM	Diagnosis	Closed fracture of base of skull with intracranial injury of other and unspecified
801.40	ICD-9-CM	Diagnosis	Closed fracture of base of skull with intracranial injury of other and unspecified nature, unspecified state of consciousness
801.41	ICD-9-CM	Diagnosis	Closed fracture of base of skull with intracranial injury of other and unspecified nature, no loss of consciousness
801.42	ICD-9-CM	Diagnosis	Closed fracture of base of skull with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness
801.43	ICD-9-CM	Diagnosis	Closed fracture of base of skull with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
801.44	ICD-9-CM	Diagnosis	Closed fracture of base of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
801.45	ICD-9-CM	Diagnosis	Closed fracture of base of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
801.46	ICD-9-CM	Diagnosis	Closed fracture of base of skull with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration
801.49	ICD-9-CM	Diagnosis	Closed fracture of base of skull with intracranial injury of other and unspecified nature, unspecified concussion
801.5	ICD-9-CM	Diagnosis	Open fracture of base of skull without mention of intracranial injury
801.50	ICD-9-CM	Diagnosis	Open fracture of base of skull without mention of intracranial injury, unspecified state of consciousness
801.51	ICD-9-CM	Diagnosis	Open fracture of base of skull without mention of intracranial injury, no loss of consciousness
801.52	ICD-9-CM	Diagnosis	Open fracture of base of skull without mention of intracranial injury, brief (less than one hour) loss of consciousness
801.53	ICD-9-CM	Diagnosis	Open fracture of base of skull without mention of intracranial injury, moderate (1-24 hours) loss of consciousness
801.54	ICD-9-CM	Diagnosis	Open fracture of base of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
801.55	ICD-9-CM	Diagnosis	Open fracture of base of skull without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
801.56	ICD-9-CM	Diagnosis	Open fracture of base of skull without mention of intracranial injury, loss of consciousness of unspecified duration
801.59	ICD-9-CM	Diagnosis	Open fracture of base of skull without mention of intracranial injury, unspecified concussion
801.6	ICD-9-CM	Diagnosis	Open fracture of base of skull with cerebral laceration and contusion
801.60	ICD-9-CM	Diagnosis	Open fracture of base of skull with cerebral laceration and contusion, unspecified state of consciousness
801.61	ICD-9-CM	Diagnosis	Open fracture of base of skull with cerebral laceration and contusion, no loss of consciousness
801.62	ICD-9-CM	Diagnosis	Open fracture of base of skull with cerebral laceration and contusion, brief (less than one hour) loss of consciousness
801.63	ICD-9-CM	Diagnosis	Open fracture of base of skull with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness
801.64	ICD-9-CM	Diagnosis	Open fracture of base of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
801.65	ICD-9-CM	Diagnosis	Open fracture of base of skull with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
801.66	ICD-9-CM	Diagnosis	Open fracture of base of skull with cerebral laceration and contusion, loss of consciousness of unspecified duration
801.69	ICD-9-CM	Diagnosis	Open fracture of base of skull with cerebral laceration and contusion, unspecified concussion
801.7	ICD-9-CM	Diagnosis	Open fracture of base of skull with subarachnoid, subdural, and extradural
801.70	ICD-9-CM	Diagnosis	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness
801.71	ICD-9-CM	Diagnosis	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness
801.72	ICD-9-CM	Diagnosis	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness
801.73	ICD-9-CM	Diagnosis	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness
801.74	ICD-9-CM	Diagnosis	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
801.75	ICD-9-CM	Diagnosis	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
801.76	ICD-9-CM	Diagnosis	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration
801.79	ICD-9-CM	Diagnosis	Open fracture of base of skull with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion
801.8	ICD-9-CM	Diagnosis	Open fracture of base of skull with other and unspecified intracranial hemorrhage
801.80	ICD-9-CM	Diagnosis	Open fracture of base of skull with other and unspecified intracranial hemorrhage, unspecified state of consciousness
801.81	ICD-9-CM	Diagnosis	Open fracture of base of skull with other and unspecified intracranial hemorrhage, no loss of consciousness
801.82	ICD-9-CM	Diagnosis	Open fracture of base of skull with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness
801.83	ICD-9-CM	Diagnosis	Open fracture of base of skull with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness
801.84	ICD-9-CM	Diagnosis	Open fracture of base of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
801.85	ICD-9-CM	Diagnosis	Open fracture of base of skull with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
801.86	ICD-9-CM	Diagnosis	Open fracture of base of skull with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration
801.89	ICD-9-CM	Diagnosis	Open fracture of base of skull with other and unspecified intracranial hemorrhage, unspecified concussion
801.9	ICD-9-CM	Diagnosis	Open fracture of base of skull with intracranial injury of other and unspecified
801.90	ICD-9-CM	Diagnosis	Open fracture of base of skull with intracranial injury of other and unspecified nature, unspecified state of consciousness
801.91	ICD-9-CM	Diagnosis	Open fracture of base of skull with intracranial injury of other and unspecified nature, no loss of consciousness
801.92	ICD-9-CM	Diagnosis	Open fracture of base of skull with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness
801.93	ICD-9-CM	Diagnosis	Open fracture of base of skull with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness
801.94	ICD-9-CM	Diagnosis	Open fracture of base of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
801.95	ICD-9-CM	Diagnosis	Open fracture of base of skull with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
801.96	ICD-9-CM	Diagnosis	Open fracture of base of skull with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration
801.99	ICD-9-CM	Diagnosis	Open fracture of base of skull with intracranial injury of other and unspecified nature, unspecified concussion
802.0	ICD-9-CM	Diagnosis	Nasal bones, closed fracture
802.1	ICD-9-CM	Diagnosis	Nasal bones, open fracture
802.2	ICD-9-CM	Diagnosis	Mandible, closed fracture
802.20	ICD-9-CM	Diagnosis	Closed fracture of unspecified site of mandible
802.21	ICD-9-CM	Diagnosis	Closed fracture of condylar process of mandible
802.22	ICD-9-CM	Diagnosis	Closed fracture of subcondylar process of mandible
802.23	ICD-9-CM	Diagnosis	Closed fracture of coronoid process of mandible
802.24	ICD-9-CM	Diagnosis	Closed fracture of unspecified part of ramus of mandible
802.25	ICD-9-CM	Diagnosis	Closed fracture of angle of jaw
802.26	ICD-9-CM	Diagnosis	Closed fracture of symphysis of body of mandible
802.27	ICD-9-CM	Diagnosis	Closed fracture of alveolar border of body of mandible
802.28	ICD-9-CM		Closed fracture of other and unspecified part of body of mandible
802.29	ICD-9-CM	Diagnosis	Closed fracture of multiple sites of mandible
802.3	ICD-9-CM	_	
802.30	ICD-9-CM	Diagnosis	
802.31	ICD-9-CM	•	
802.32	ICD-9-CM	•	
802.33	ICD-9-CM	Ū	Open fracture of coronoid process of mandible



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
802.34	ICD-9-CM	Diagnosis	Open fracture of unspecified part of ramus of mandible
802.35	ICD-9-CM	Diagnosis	Open fracture of angle of jaw
802.36	ICD-9-CM	Diagnosis	Open fracture of symphysis of body of mandible
802.37	ICD-9-CM	Diagnosis	Open fracture of alveolar border of body of mandible
802.38	ICD-9-CM	Diagnosis	Open fracture of other and unspecified part of body of mandible
802.39	ICD-9-CM	Diagnosis	Open fracture of multiple sites of mandible
802.4	ICD-9-CM	Diagnosis	Malar and maxillary bones, closed fracture
802.5	ICD-9-CM	Diagnosis	Malar and maxillary bones, open fracture
802.6	ICD-9-CM	Diagnosis	Orbital floor (blow-out), closed fracture
802.7	ICD-9-CM	Diagnosis	Orbital floor (blow-out), open fracture
802.8	ICD-9-CM	Diagnosis	Other facial bones, closed fracture
802.9	ICD-9-CM	Diagnosis	Other facial bones, open fracture
803.0	ICD-9-CM	Diagnosis	Other closed skull fracture without mention of intracranial injury
803.00	ICD-9-CM	Diagnosis	Other closed skull fracture without mention of intracranial injury, unspecified state of consciousness
803.01	ICD-9-CM	Diagnosis	Other closed skull fracture without mention of intracranial injury, no loss of consciousness
803.02	ICD-9-CM	Diagnosis	Other closed skull fracture without mention of intracranial injury, brief (less than one hour) loss of consciousness
803.03	ICD-9-CM	Diagnosis	Other closed skull fracture without mention of intracranial injury, moderate (1-24 hours) loss of consciousness
803.04	ICD-9-CM	Diagnosis	Other closed skull fracture without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
803.05	ICD-9-CM	Diagnosis	Other closed skull fracture without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
803.06	ICD-9-CM	Diagnosis	Other closed skull fracture without mention of intracranial injury, loss of consciousness of unspecified duration
803.09	ICD-9-CM	Diagnosis	Other closed skull fracture without mention of intracranial injury, unspecified concussion
803.1	ICD-9-CM	Diagnosis	Other closed skull fracture with cerebral laceration and contusion
803.10	ICD-9-CM	Diagnosis	Other closed skull fracture with cerebral laceration and contusion, unspecified state of consciousness
803.11	ICD-9-CM	Diagnosis	
803.12	ICD-9-CM	Diagnosis	Other closed skull fracture with cerebral laceration and contusion, brief (less than one hour) loss of consciousness
803.13	ICD-9-CM	Diagnosis	Other closed skull fracture with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
803.14	ICD-9-CM	Diagnosis	Other closed skull fracture with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
803.15	ICD-9-CM	Diagnosis	Other closed skull fracture with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
803.16	ICD-9-CM	Diagnosis	Other closed skull fracture with cerebral laceration and contusion, loss of consciousness of unspecified duration
803.19	ICD-9-CM	Diagnosis	Other closed skull fracture with cerebral laceration and contusion, unspecified concussion
803.2	ICD-9-CM	Diagnosis	Other closed skull fracture with subarachnoid, subdural, and extradural
803.20	ICD-9-CM	Diagnosis	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness
803.21	ICD-9-CM	Diagnosis	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness
803.22	ICD-9-CM	Diagnosis	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness
803.23	ICD-9-CM	Diagnosis	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness
803.24	ICD-9-CM	Diagnosis	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
803.25	ICD-9-CM	Diagnosis	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
803.26	ICD-9-CM	Diagnosis	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration
803.29	ICD-9-CM	Diagnosis	Other closed skull fracture with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion
803.3	ICD-9-CM	Diagnosis	Closed skull fracture with other and unspecified intracranial hemorrhage
803.30	ICD-9-CM	Diagnosis	Other closed skull fracture with other and unspecified intracranial hemorrhage, unspecified state of unconsciousness
803.31	ICD-9-CM	Diagnosis	Other closed skull fracture with other and unspecified intracranial hemorrhage, no loss of consciousness
803.32	ICD-9-CM	Diagnosis	Other closed skull fracture with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness
803.33	ICD-9-CM	Diagnosis	Other closed skull fracture with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness
803.34	ICD-9-CM	Diagnosis	Other closed skull fracture with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
803.35	ICD-9-CM	Diagnosis	Other closed skull fracture with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
803.36	ICD-9-CM	Diagnosis	Other closed skull fracture with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration
803.39	ICD-9-CM	Diagnosis	Other closed skull fracture with other and unspecified intracranial hemorrhage, unspecified concussion
803.4	ICD-9-CM	Diagnosis	Other closed skull fracture with intracranial injury of other and unspecified nature
803.40	ICD-9-CM	Diagnosis	Other closed skull fracture with intracranial injury of other and unspecified nature, unspecified state of consciousness
803.41	ICD-9-CM	Diagnosis	Other closed skull fracture with intracranial injury of other and unspecified nature, no loss of consciousness
803.42	ICD-9-CM	Diagnosis	Other closed skull fracture with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness
803.43	ICD-9-CM	Diagnosis	Other closed skull fracture with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness
803.44	ICD-9-CM	Diagnosis	Other closed skull fracture with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
803.45	ICD-9-CM	Diagnosis	Other closed skull fracture with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to preexisting conscious level
803.46	ICD-9-CM	Diagnosis	Other closed skull fracture with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration
803.49	ICD-9-CM	Diagnosis	Other closed skull fracture with intracranial injury of other and unspecified nature, unspecified concussion
803.5	ICD-9-CM	Diagnosis	Other open skull fracture without mention of intracranial injury
803.50	ICD-9-CM	Diagnosis	Other open skull fracture without mention of injury, state of consciousness
803.51	ICD-9-CM	Diagnosis	Other open skull fracture without mention of intracranial injury, no loss of consciousness
803.52	ICD-9-CM	Diagnosis	Other open skull fracture without mention of intracranial injury, brief (less than one hour) loss of consciousness
803.53	ICD-9-CM	Diagnosis	Other open skull fracture without mention of intracranial injury, moderate (1-24 hours) loss of consciousness
803.54	ICD-9-CM	Diagnosis	Other open skull fracture without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
803.55	ICD-9-CM	Diagnosis	Other open skull fracture without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
803.56	ICD-9-CM	Diagnosis	Other open skull fracture without mention of intracranial injury, loss of consciousness of unspecified duration
803.59	ICD-9-CM	Diagnosis	Other open skull fracture without mention of intracranial injury, unspecified
803.6	ICD-9-CM	Diagnosis	Other open skull fracture with cerebral laceration and contusion
803.60	ICD-9-CM	Diagnosis	Other open skull fracture with cerebral laceration and contusion, unspecified state of consciousness
803.61	ICD-9-CM	Diagnosis	Other open skull fracture with cerebral laceration and contusion, no loss of consciousness
803.62	ICD-9-CM	Diagnosis	Other open skull fracture with cerebral laceration and contusion, brief (less than one hour) loss of consciousness
803.63	ICD-9-CM	Diagnosis	Other open skull fracture with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness
803.64	ICD-9-CM	Diagnosis	Other open skull fracture with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
803.65	ICD-9-CM	Diagnosis	Other open skull fracture with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
803.66	ICD-9-CM	Diagnosis	Other open skull fracture with cerebral laceration and contusion, loss of consciousness of unspecified duration
803.69	ICD-9-CM	Diagnosis	Other open skull fracture with cerebral laceration and contusion, unspecified concussion
803.7	ICD-9-CM	Diagnosis	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage
803.70	ICD-9-CM	Diagnosis	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness
803.71	ICD-9-CM	Diagnosis	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness
803.72	ICD-9-CM	Diagnosis	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness
803.73	ICD-9-CM	Diagnosis	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness
803.74	ICD-9-CM	Diagnosis	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
803.75	ICD-9-CM	Diagnosis	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
803.76	ICD-9-CM	Diagnosis	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration
803.79	ICD-9-CM	Diagnosis	Other open skull fracture with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
803.8	ICD-9-CM	Diagnosis	Other open skull fracture with other and unspecified intracranial hemorrhage
803.80	ICD-9-CM	Diagnosis	Other open skull fracture with other and unspecified intracranial hemorrhage, unspecified state of consciousness
803.81	ICD-9-CM	Diagnosis	Other open skull fracture with other and unspecified intracranial hemorrhage, no loss of consciousness
803.82	ICD-9-CM	Diagnosis	Other open skull fracture with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness
803.83	ICD-9-CM	Diagnosis	Other open skull fracture with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness
803.84	ICD-9-CM	Diagnosis	Other open skull fracture with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
803.85	ICD-9-CM	Diagnosis	Other open skull fracture with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
803.86	ICD-9-CM	Diagnosis	Other open skull fracture with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration
803.89	ICD-9-CM	Diagnosis	Other open skull fracture with other and unspecified intracranial hemorrhage, unspecified concussion
803.9	ICD-9-CM	Diagnosis	Other open skull fracture with intracranial injury of other and unspecified nature
803.90	ICD-9-CM	Diagnosis	Other open skull fracture with intracranial injury of other and unspecified nature, unspecified state of consciousness
803.91	ICD-9-CM	Diagnosis	Other open skull fracture with intracranial injury of other and unspecified nature, no loss of consciousness
803.92	ICD-9-CM	Diagnosis	Other open skull fracture with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness
803.93	ICD-9-CM	Diagnosis	Other open skull fracture with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness
803.94	ICD-9-CM	Diagnosis	Other open skull fracture with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
803.95	ICD-9-CM	Diagnosis	Other open skull fracture with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to preexisting conscious level
803.96	ICD-9-CM	Diagnosis	Other open skull fracture with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration
803.99	ICD-9-CM	Diagnosis	Other open skull fracture with intracranial injury of other and unspecified nature, unspecified concussion
804.0	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, without mention of intracranial injury



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
804.00	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, without mention of intracranial injury, unspecified state of consciousness
804.01	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, without mention of intracranial injury, no loss of consciousness
804.02	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, without mention of intracranial injury, brief (less than one hour) loss of consciousness
804.03	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, without mention of intracranial injury, moderate (1-24 hours) loss of consciousness
804.04	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, without mention or intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
804.05	ICD-9-CM	Diagnosis	Closed fractures involving skull of face with other bones, without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
804.06	ICD-9-CM	Diagnosis	Closed fractures involving skull of face with other bones, without mention of intracranial injury, loss of consciousness of unspecified duration
804.09	ICD-9-CM	Diagnosis	Closed fractures involving skull of face with other bones, without mention of intracranial injury, unspecified concussion
804.1	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion
804.10	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, unspecified state of consciousness
804.11	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, no loss of consciousness
804.12	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, brief (less than one hour) loss of consciousness
804.13	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness
804.14	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
804.15	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
804.16	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, loss of consciousness of unspecified duration
804.19	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with cerebral laceration and contusion, unspecified concussion
804.2	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
804.20	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness
804.21	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness
804.22	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness
804.23	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness
804.24	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
804.25	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
804.26	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration
804.29	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion
804.3	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage
804.30	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, unspecified state of consciousness
804.31	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, no loss of consciousness
804.32	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness
804.33	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness
804.34	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to preexisting conscious level



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
804.35	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
804.36	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration
804.39	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, unspecified concussion
804.4	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature
804.40	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, unspecified state of consciousness
804.41	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, no loss of consciousness
804.42	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness
804.43	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness
804.44	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
804.45	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
804.46	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration
804.49	ICD-9-CM	Diagnosis	Closed fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, unspecified concussion
804.5	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, without mention of intracranial injury
804.50	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, without mention of intracranial injury, unspecified state of consciousness
804.51	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, without mention of intracranial injury, no loss of consciousness
804.52	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, without mention of intracranial injury, brief (less than one hour) loss of consciousness
804.53	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, without mention of intracranial injury, moderate (1-24 hours) loss of consciousness



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
804.54	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
804.55	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, without mention of intracranial injury, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
804.56	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, without mention of intracranial injury, loss of consciousness of unspecified duration
804.59	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, without mention of intracranial injury, unspecified concussion
804.6	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with cerebral laceration and contusion
804.60	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, unspecified state of consciousness
804.61	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, no loss of consciousness
804.62	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, brief (less than one hour) loss of consciousness
804.63	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, moderate (1-24 hours) loss of consciousness
804.64	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
804.65	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
804.66	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, loss of consciousness of unspecified duration
804.69	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with cerebral laceration and contusion, unspecified concussion
804.7	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage
804.70	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, unspecified state of consciousness
804.71	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, no loss of consciousness
804.72	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, brief (less than one hour) loss of consciousness
804.73	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, moderate (1-24 hours) loss of consciousness



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
804.74	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
804.75	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
804.76	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, loss of consciousness of unspecified duration
804.79	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones with subarachnoid, subdural, and extradural hemorrhage, unspecified concussion
804.8	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage
804.80	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, unspecified state of consciousness
804.81	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, no loss of consciousness
804.82	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, brief (less than one hour) loss of consciousness
804.83	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, moderate (1-24 hours) loss of consciousness
804.84	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
804.85	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
804.86	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, loss of consciousness of unspecified duration
804.89	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with other and unspecified intracranial hemorrhage, unspecified concussion
804.9	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature
804.90	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, unspecified state of consciousness
804.91	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, no loss of consciousness



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

,	Code	Code	
Code	Type	Category	Description
804.92	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, brief (less than one hour) loss of consciousness
804.93	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, moderate (1-24 hours) loss of consciousness
804.94	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
804.95	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing level
804.96	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, loss of consciousness of unspecified duration
804.99	ICD-9-CM	Diagnosis	Open fractures involving skull or face with other bones, with intracranial injury of other and unspecified nature, unspecified concussion
8051	ICD-9-CM	Diagnosis	Open fracture of cervical vertebra without mention of spinal cord injury
805.0	ICD-9-CM	Diagnosis	Closed fracture of cervical vertebra without mention of spinal cord injury
805.00	ICD-9-CM	Diagnosis	Closed fracture of cervical vertebra, unspecified level without mention of spinal
805.01	ICD-9-CM	Diagnosis	Closed fracture of first cervical vertebra without mention of spinal cord injury
805.02	ICD-9-CM	Diagnosis	Closed fracture of second cervical vertebra without mention of spinal cord injury
805.03	ICD-9-CM	Diagnosis	Closed fracture of third cervical vertebra without mention of spinal cord injury
805.04	ICD-9-CM	Diagnosis	Closed fracture of fourth cervical vertebra without mention of spinal cord injury
805.05	ICD-9-CM	Diagnosis	Closed fracture of fifth cervical vertebra without mention of spinal cord injury
805.06	ICD-9-CM	Diagnosis	Closed fracture of sixth cervical vertebra without mention of spinal cord injury
805.07	ICD-9-CM	Diagnosis	Closed fracture of seventh cervical vertebra without mention of spinal cord injury
805.08	ICD-9-CM	Diagnosis	Closed fracture of multiple cervical vertebrae without mention of spinal cord injury
805.1	ICD-9-CM	Diagnosis	Open fracture of cervical vertebra without mention of spinal cord injury
805.10	ICD-9-CM	Diagnosis	Open fracture of cervical vertebra, unspecified level without mention of spinal cord
805.11	ICD-9-CM	Diagnosis	Open fracture of first cervical vertebra without mention of spinal cord injury
805.12	ICD-9-CM	Diagnosis	Open fracture of second cervical vertebra without mention of spinal cord injury
805.13	ICD-9-CM	Diagnosis	Open fracture of third cervical vertebra without mention of spinal cord injury
805.14	ICD-9-CM	Diagnosis	Open fracture of fourth cervical vertebra without mention of spinal cord injury
805.15	ICD-9-CM	Diagnosis	Open fracture of fifth cervical vertebra without mention of spinal cord injury
805.16	ICD-9-CM	Diagnosis	Open fracture of sixth cervical vertebra without mention of spinal cord injury



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
805.17	ICD-9-CM	Diagnosis	Open fracture of seventh cervical vertebra without mention of spinal cord injury
805.18	ICD-9-CM	Diagnosis	Open fracture of multiple cervical vertebrae without mention of spinal cord injury
805.2	ICD-9-CM	Diagnosis	Closed fracture of dorsal (thoracic) vertebra without mention of spinal cord injury
805.3	ICD-9-CM	Diagnosis	Open fracture of dorsal (thoracic) vertebra without mention of spinal cord injury
805.4	ICD-9-CM	Diagnosis	Closed fracture of lumbar vertebra without mention of spinal cord injury
805.5	ICD-9-CM	Diagnosis	Open fracture of lumbar vertebra without mention of spinal cord injury
805.6	ICD-9-CM	Diagnosis	Closed fracture of sacrum and coccyx without mention of spinal cord injury
805.7	ICD-9-CM	Diagnosis	Open fracture of sacrum and coccyx without mention of spinal cord injury
805.8	ICD-9-CM	Diagnosis	Closed fracture of unspecified part of vertebral column without mention of spinal
805.9	ICD-9-CM	Diagnosis	Open fracture of unspecified part of vertebral column without mention of spinal
806.0	ICD-9-CM	Diagnosis	Closed fracture of cervical vertebra with spinal cord injury
806.00	ICD-9-CM	Diagnosis	Closed fracture of C1-C4 level with unspecified spinal cord injury
806.01	ICD-9-CM	Diagnosis	Closed fracture of C1-C4 level with complete lesion of cord
806.02	ICD-9-CM	Diagnosis	Closed fracture of C1-C4 level with anterior cord syndrome
806.03	ICD-9-CM	Diagnosis	Closed fracture of C1-C4 level with central cord syndrome
806.04	ICD-9-CM	Diagnosis	Closed fracture of C1-C4 level with other specified spinal cord injury
806.05	ICD-9-CM	Diagnosis	Closed fracture of C5-C7 level with unspecified spinal cord injury
806.06	ICD-9-CM	Diagnosis	Closed fracture of C5-C7 level with complete lesion of cord
806.07	ICD-9-CM	Diagnosis	Closed fracture of C5-C7 level with anterior cord syndrome
806.08	ICD-9-CM	Diagnosis	Closed fracture of C5-C7 level with central cord syndrome
806.09	ICD-9-CM	Diagnosis	Closed fracture of C5-C7 level with other specified spinal cord injury
806.1	ICD-9-CM	Diagnosis	Open fracture of cervical vertebra with spinal cord injury
806.10	ICD-9-CM	Diagnosis	Open fracture of C1-C4 level with unspecified spinal cord injury
806.11	ICD-9-CM	Diagnosis	Open fracture of C1-C4 level with complete lesion of cord
806.12	ICD-9-CM	Diagnosis	Open fracture of C1-C4 level with anterior cord syndrome
806.13	ICD-9-CM	Diagnosis	Open fracture of C1-C4 level with central cord syndrome
806.14	ICD-9-CM	Diagnosis	Open fracture of C1-C4 level with other specified spinal cord injury
806.15	ICD-9-CM	Diagnosis	Open fracture of C5-C7 level with unspecified spinal cord injury
806.16	ICD-9-CM	Diagnosis	Open fracture of C5-C7 level with complete lesion of cord
806.17	ICD-9-CM	Diagnosis	Open fracture of C5-C7 level with anterior cord syndrome
806.18	ICD-9-CM	Diagnosis	Open fracture of C5-C7 level with central cord syndrome
806.19	ICD-9-CM	Diagnosis	Open fracture of C5-C7 level with other specified spinal cord injury



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

,	Code	Code	
Code	Туре	Category	Description
806.2	ICD-9-CM	Diagnosis	Closed fracture of dorsal (thoracic) vertebra with spinal cord injury
806.20	ICD-9-CM	Diagnosis	Closed fracture of T1-T6 level with unspecified spinal cord injury
806.21	ICD-9-CM	Diagnosis	Closed fracture of T1-T6 level with complete lesion of cord
806.22	ICD-9-CM	Diagnosis	Closed fracture of T1-T6 level with anterior cord syndrome
806.23	ICD-9-CM	Diagnosis	Closed fracture of T1-T6 level with central cord syndrome
806.24	ICD-9-CM	Diagnosis	Closed fracture of T1-T6 level with other specified spinal cord injury
806.25	ICD-9-CM	Diagnosis	Closed fracture of T7-T12 level with unspecified spinal cord injury
806.26	ICD-9-CM	Diagnosis	Closed fracture of T7-T12 level with complete lesion of cord
806.27	ICD-9-CM	Diagnosis	Closed fracture of T7-T12 level with anterior cord syndrome
806.28	ICD-9-CM	Diagnosis	Closed fracture of T7-T12 level with central cord syndrome
806.29	ICD-9-CM	Diagnosis	Closed fracture of T7-T12 level with other specified spinal cord injury
806.3	ICD-9-CM	Diagnosis	Open fracture of dorsal vertebra with spinal cord injury
806.30	ICD-9-CM	Diagnosis	Open fracture of T1-T6 level with unspecified spinal cord injury
806.31	ICD-9-CM	Diagnosis	Open fracture of T1-T6 level with complete lesion of cord
806.32	ICD-9-CM	Diagnosis	Open fracture of T1-T6 level with anterior cord syndrome
806.33	ICD-9-CM	Diagnosis	Open fracture of T1-T6 level with central cord syndrome
806.34	ICD-9-CM	Diagnosis	Open fracture of T1-T6 level with other specified spinal cord injury
806.35	ICD-9-CM	Diagnosis	Open fracture of T7-T12 level with unspecified spinal cord injury
806.36	ICD-9-CM	Diagnosis	Open fracture of T7-T12 level with complete lesion of cord
806.37	ICD-9-CM	Diagnosis	Open fracture of T7-T12 level with anterior cord syndrome
806.38	ICD-9-CM	Diagnosis	Open fracture of T7-T12 level with central cord syndrome
806.39	ICD-9-CM	Diagnosis	Open fracture of T7-T12 level with other specified spinal cord injury
806.4	ICD-9-CM	Diagnosis	Closed fracture of lumbar spine with spinal cord injury
806.5	ICD-9-CM	Diagnosis	Open fracture of lumbar spine with spinal cord injury
806.6	ICD-9-CM	Diagnosis	Closed fracture of sacrum and coccyx with spinal cord injury
806.60	ICD-9-CM	Diagnosis	Closed fracture of sacrum and coccyx with unspecified spinal cord injury
806.61	ICD-9-CM	Diagnosis	Closed fracture of sacrum and coccyx with complete cauda equina lesion
806.62	ICD-9-CM	Diagnosis	Closed fracture of sacrum and coccyx with other cauda equina injury
806.69	ICD-9-CM	Diagnosis	Closed fracture of sacrum and coccyx with other spinal cord injury
806.7	ICD-9-CM	Diagnosis	Open fracture of sacrum and coccyx with spinal cord injury
806.70	ICD-9-CM	Diagnosis	Open fracture of sacrum and coccyx with unspecified spinal cord injury
806.71	ICD-9-CM	Diagnosis	Open fracture of sacrum and coccyx with complete cauda equina lesion



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

Code	Type	Category	Description
806.72			Open fracture of sacrum and coccyx with other cauda equina injury
806.79	ICD-9-CM	Diagnosis	Open fracture of sacrum and coccyx with other spinal cord injury
806.8	ICD-9-CM	Diagnosis	Closed fracture of unspecified vertebra with spinal cord injury
806.9	ICD-9-CM	Diagnosis	Open fracture of unspecified vertebra with spinal cord injury
807.0	ICD-9-CM	Diagnosis	Closed fracture of rib(s)
807.00	ICD-9-CM	Diagnosis	Closed fracture of rib(s), unspecified
807.01	ICD-9-CM	Diagnosis	Closed fracture of one rib
807.02	ICD-9-CM	Diagnosis	Closed fracture of two ribs
807.03	ICD-9-CM	Diagnosis	Closed fracture of three ribs
807.04	ICD-9-CM	Diagnosis	Closed fracture of four ribs
807.05	ICD-9-CM	Diagnosis	Closed fracture of five ribs
807.06	ICD-9-CM	Diagnosis	Closed fracture of six ribs
807.07	ICD-9-CM	Diagnosis	Closed fracture of seven ribs
807.08	ICD-9-CM	Diagnosis	Closed fracture of eight or more ribs
807.09	ICD-9-CM	Diagnosis	Closed fracture of multiple ribs, unspecified
807.1	ICD-9-CM	Diagnosis	Open fracture of rib(s)
807.10	ICD-9-CM	Diagnosis	Open fracture of rib(s), unspecified
807.11	ICD-9-CM	Diagnosis	Open fracture of one rib
807.12	ICD-9-CM	Diagnosis	Open fracture of two ribs
807.13	ICD-9-CM	Diagnosis	Open fracture of three ribs
807.14	ICD-9-CM	Diagnosis	Open fracture of four ribs
807.15	ICD-9-CM	Diagnosis	Open fracture of five ribs
807.16	ICD-9-CM	Diagnosis	Open fracture of six ribs
807.17	ICD-9-CM	Diagnosis	Open fracture of seven ribs
807.18	ICD-9-CM	Diagnosis	Open fracture of eight or more ribs
807.19	ICD-9-CM	Diagnosis	Open fracture of multiple ribs, unspecified
807.2	ICD-9-CM	Diagnosis	Closed fracture of sternum
807.3	ICD-9-CM	Diagnosis	Open fracture of sternum
807.4	ICD-9-CM	Diagnosis	Flail chest
807.5	ICD-9-CM	Diagnosis	Closed fracture of larynx and trachea
807.6	ICD-9-CM	Diagnosis	Open fracture of larynx and trachea
809.0	ICD-9-CM	Diagnosis	Fracture of bones of trunk, closed



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
809.1	ICD-9-CM	Diagnosis	Fracture of bones of trunk, open
820.30	ICD-9-CM	Diagnosis	Open fracture of unspecified trochanteric section of femur
820.31	ICD-9-CM	Diagnosis	Open fracture of intertrochanteric section of femur
820.32	ICD-9-CM	Diagnosis	Open fracture of subtrochanteric section of femur
822.0	ICD-9-CM	Diagnosis	Closed fracture of patella
822.1	ICD-9-CM	Diagnosis	Open fracture of patella
823.0	ICD-9-CM	Diagnosis	Closed fracture of upper end of tibia and fibula
823.00	ICD-9-CM	Diagnosis	Closed fracture of upper end of tibia
823.01	ICD-9-CM	Diagnosis	Closed fracture of upper end of fibula
823.02	ICD-9-CM	Diagnosis	Closed fracture of upper end of fibula with tibia
823.1	ICD-9-CM	Diagnosis	Open fracture of upper end of tibia and fibula
823.10	ICD-9-CM	Diagnosis	Open fracture of upper end of tibia
823.11	ICD-9-CM	Diagnosis	Open fracture of upper end of fibula
823.12	ICD-9-CM	Diagnosis	Open fracture of upper end of fibula with tibia
823.2	ICD-9-CM	Diagnosis	Closed fracture of shaft of tibia and fibula
823.20	ICD-9-CM	Diagnosis	Closed fracture of shaft of tibia
823.21	ICD-9-CM	Diagnosis	Closed fracture of shaft of fibula
823.22	ICD-9-CM	Diagnosis	Closed fracture of shaft of fibula with tibia
823.3	ICD-9-CM	Diagnosis	Open fracture of shaft of tibia and fibula
823.3	ICD-9-CM	Diagnosis	Open fracture of shaft of tibia
823.31	ICD-9-CM	Diagnosis	Open fracture of shaft of fibula
823.32	ICD-9-CM	Diagnosis	Open fracture of shaft of fibula with tibia
823.4	ICD-9-CM	Diagnosis	Torus fracture of tibia and fibula
823.40	ICD-9-CM	Diagnosis	Torus fracture of tibia alone
823.41	ICD-9-CM	Diagnosis	Torus fracture of fibula alone
823.42	ICD-9-CM	Diagnosis	Torus fracture of fibula with tibia
823.8	ICD-9-CM	Diagnosis	Closed fracture of unspecified part of tibia and fibula
823.80	ICD-9-CM	Diagnosis	Closed fracture of unspecified part of tibia
823.81	ICD-9-CM	Diagnosis	Closed fracture of unspecified part of fibula
823.82	ICD-9-CM	Diagnosis	Closed fracture of unspecified part of fibula with tibia
823.9	ICD-9-CM	Diagnosis	Open fracture of unspecified part of tibia and fibula
823.90	ICD-9-CM	Diagnosis	Open fracture of unspecified part of tibia



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
823.91	ICD-9-CM	Diagnosis	Open fracture of unspecified part of fibula
823.92	ICD-9-CM	Diagnosis	Open fracture of unspecified part of fibula with tibia
824.0	ICD-9-CM	Diagnosis	Closed fracture of medial malleolus
824.1	ICD-9-CM	Diagnosis	Open fracture of medial malleolus
824.2	ICD-9-CM	Diagnosis	Closed fracture of lateral malleolus
824.3	ICD-9-CM	Diagnosis	Open fracture of lateral malleolus
824.4	ICD-9-CM	Diagnosis	Closed bimalleolar fracture
824.5	ICD-9-CM	Diagnosis	Open bimalleolar fracture
824.6	ICD-9-CM	Diagnosis	Closed trimalleolar fracture
824.7	ICD-9-CM	Diagnosis	Open trimalleolar fracture
824.8	ICD-9-CM	Diagnosis	Unspecified closed fracture of ankle
824.9	ICD-9-CM	Diagnosis	Unspecified open fracture of ankle
825.0	ICD-9-CM	Diagnosis	Closed fracture of calcaneus
825.1	ICD-9-CM	Diagnosis	Open fracture of calcaneus
825.2	ICD-9-CM	Diagnosis	Closed fracture of other tarsal and metatarsal bones
825.20	ICD-9-CM	Diagnosis	Closed fracture of unspecified bone(s) of foot (except toes)
825.21	ICD-9-CM	Diagnosis	Closed fracture of astragalus
825.22	ICD-9-CM	Diagnosis	Closed fracture of navicular (scaphoid) bone of foot
825.23	ICD-9-CM	Diagnosis	Closed fracture of cuboid bone
825.24	ICD-9-CM	Diagnosis	Closed fracture of cuneiform bone of foot
825.25	ICD-9-CM	Diagnosis	Closed fracture of metatarsal bone(s)
825.29	ICD-9-CM	Diagnosis	Other closed fracture of tarsal and metatarsal bones
825.3	ICD-9-CM	Diagnosis	Open fracture of other tarsal and metatarsal bones
825.30	ICD-9-CM	Diagnosis	Open fracture of unspecified bone(s) of foot (except toes)
825.31	ICD-9-CM	Diagnosis	Open fracture of astragalus
825.32	ICD-9-CM	Diagnosis	Open fracture of navicular (scaphoid) bone of foot
825.33	ICD-9-CM	Diagnosis	Open fracture of cuboid bone
825.34	ICD-9-CM	Diagnosis	Open fracture of cuneiform bone of foot,
825.35	ICD-9-CM	Diagnosis	Open fracture of metatarsal bone(s)
825.39	ICD-9-CM	Diagnosis	Other open fractures of tarsal and metatarsal bones
826.0	ICD-9-CM	Diagnosis	Closed fracture of one or more phalanges of foot
826.1	ICD-9-CM	Diagnosis	Open fracture of one or more phalanges of foot



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

Code	Code Type	Code Category	Description
827.0			Other, multiple and ill-defined closed fractures of lower limb
827.1	ICD-9-CM	Diagnosis	Other, multiple and ill-defined open fractures of lower limb
828.0	ICD-9-CM	Diagnosis	Multiple closed fractures involving both lower limbs, lower with upper limb, and lower limb(s) with rib(s) and sternum
828.1	ICD-9-CM	Diagnosis	Multiple fractures involving both lower limbs, lower with upper limb, and lower limb(s) with rib(s) and sternum, open
829.0	ICD-9-CM	Diagnosis	Closed fracture of unspecified bone
829.1	ICD-9-CM	Diagnosis	Open fracture of unspecified bone
851	ICD-9-CM	Diagnosis	Cerebral laceration and contusion
851.0	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound
851.00	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, state of consciousness unspecified
851.01	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, no loss of consciousness
851.02	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness
851.03	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness
851.04	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
851.05	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.06	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, loss of consciousness of unspecified duration
851.09	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion without mention of open intracranial wound, unspecified concussion
851.1	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound
851.10	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, unspecified state of consciousness
851.11	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, no loss of consciousness
851.12	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, brief (less than 1 hour) loss of consciousness
851.13	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, moderate (1-24 hours) loss of consciousness



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
851.14	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
851.15	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.16	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, loss of consciousness of unspecified duration
851.19	ICD-9-CM	Diagnosis	Cortex (cerebral) contusion with open intracranial wound, unspecified concussion
851.2	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound
851.20	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound, unspecified state of consciousness
851.21	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound, no loss of consciousness
851.22	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness
851.23	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness
851.24	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
851.25	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.26	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound, loss of consciousness of unspecified duration
851.29	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration without mention of open intracranial wound, unspecified concussion
851.3	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound
851.30	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, unspecified state of consciousness
851.31	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, no loss of consciousness
851.32	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, brief (less than 1 hour) loss of consciousness
851.33	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, moderate (1-24 hours) loss of consciousness
851.34	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

<u>, </u>	Code	Code	
Code	Type	Category	Description
851.35	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.36	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, loss of consciousness of unspecified duration
851.39	ICD-9-CM	Diagnosis	Cortex (cerebral) laceration with open intracranial wound, unspecified concussion
851.4	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound
851.40	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, unspecified state of consciousness
851.41	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, no loss of consciousness
851.42	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness
851.43	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness
851.44	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss consciousness and return to pre-existing conscious level
851.45	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.46	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, loss of consciousness of unspecified duration
851.49	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion without mention of open intracranial wound, unspecified concussion
851.5	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound
851.50	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, unspecified state of consciousness
851.51	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, no loss of consciousness
851.52	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, brief (less than 1 hour) loss of consciousness
851.53	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, moderate (1-24 hours) loss of consciousness
851.54	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
851.55	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.56	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, loss of consciousness of unspecified duration
851.59	ICD-9-CM	Diagnosis	Cerebellar or brain stem contusion with open intracranial wound, unspecified concussion
851.6	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound
851.60	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, unspecified state of consciousness
851.61	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, no loss of consciousness
851.62	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness
851.63	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness
851.64	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
851.65	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to preexisting conscious level
851.66	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, loss of consciousness of unspecified duration
851.69	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration without mention of open intracranial wound, unspecified concussion
851.7	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound
851.70	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, state of consciousness unspecified
851.71	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, no loss of consciousness
851.72	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, brief (less than one hour) loss of consciousness
851.73	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, moderate (1-24 hours) loss of consciousness
851.74	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
851.75	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.76	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, loss of consciousness of unspecified duration
851.79	ICD-9-CM	Diagnosis	Cerebellar or brain stem laceration with open intracranial wound, unspecified concussion
851.8	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound
851.80	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, unspecified state of consciousness
851.81	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, no loss of consciousness
851.82	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness
851.83	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness
851.84	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to preexisting conscious level
851.85	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.86	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, loss of consciousness of unspecified duration
851.89	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, without mention of open intracranial wound, unspecified concussion
851.9	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound
851.90	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, unspecified state of consciousness
851.91	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, no loss of consciousness
851.92	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, brief (less than 1 hour) loss of consciousness
851.93	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, moderate (1-24 hours) loss of consciousness
851.94	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
851.95	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
851.96	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, loss of consciousness of unspecified duration
851.99	ICD-9-CM	Diagnosis	Other and unspecified cerebral laceration and contusion, with open intracranial wound, unspecified concussion
852.10	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, unspecified state of consciousness
852.11	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, no loss of consciousness
852.12	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness
852.13	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness
852.14	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
852.15	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
852.16	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration
852.19	ICD-9-CM	Diagnosis	Subarachnoid hemorrhage following injury, with open intracranial wound, unspecified concussion
852.3	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound
852.30	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, state of consciousness unspecified
852.31	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, no loss of consciousness
852.32	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness
852.33	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness
852.34	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
852.35	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
852.36	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration
852.39	ICD-9-CM	Diagnosis	Subdural hemorrhage following injury, with open intracranial wound, unspecified concussion
852.50	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, state of consciousness unspecified
852.51	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, no loss of consciousness
852.52	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness
852.53	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness
852.54	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
852.55	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
852.56	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration
852.59	ICD-9-CM	Diagnosis	Extradural hemorrhage following injury, with open intracranial wound, unspecified concussion
853.10	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, unspecified state of consciousness
853.11	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, no loss of consciousness
853.12	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, brief (less than 1 hour) loss of consciousness
853.13	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, moderate (1-24 hours) loss of consciousness
853.14	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
853.15	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
853.16	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, loss of consciousness of unspecified duration
853.19	ICD-9-CM	Diagnosis	Other and unspecified intracranial hemorrhage following injury, with open intracranial wound, unspecified concussion
854	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature
854	ICD-9-CM	Diagnosis	



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
854.0	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature without mention of open intracranial wound
854.00	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, unspecified state of consciousness
854.01	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, no loss of consciousness
854.02	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, brief (less than 1 hour) loss of consciousness
854.03	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, moderate (1-24 hours) loss of consciousness
854.04	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
854.05	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to pre-existing conscious level
854.06	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, loss of consciousness of unspecified duration
854.09	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, without mention of open intracranial wound, unspecified concussion
854.1	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature with open intracranial wound
854.10	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, unspecified state of consciousness
854.11	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, no loss of consciousness
854.12	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, brief (less than 1 hour) loss of consciousness
854.13	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, moderate (1-24 hours) loss of consciousness
854.14	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness and return to pre-existing conscious level
854.15	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, prolonged (more than 24 hours) loss of consciousness, without return to preexisting conscious level
854.16	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, loss of consciousness of unspecified duration
854.19	ICD-9-CM	Diagnosis	Intracranial injury of other and unspecified nature, with open intracranial wound, with unspecified concussion
861	ICD-9-CM	Diagnosis	



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

Code	Code Type	Code Category	Description
861.0		Diagnosis	Heart injury, without mention of open wound into thorax
861.00	ICD-9-CM	Diagnosis	Unspecified injury to heart without mention of open wound into thorax
861.01	ICD-9-CM	Diagnosis	Heart contusion without mention of open wound into thorax
861.02	ICD-9-CM	Diagnosis	Heart laceration without penetration of heart chambers or mention of open
861.03	ICD-9-CM	Diagnosis	Heart laceration with penetration of heart chambers, without mention of open
861.1	ICD-9-CM	Diagnosis	Heart injury, with open wound into thorax
861.10	ICD-9-CM	Diagnosis	Unspecified injury to heart with open wound into thorax
861.11	ICD-9-CM	Diagnosis	Heart contusion with open wound into thorax
861.12	ICD-9-CM	Diagnosis	Heart laceration without penetration of heart chambers, with open wound into
861.13	ICD-9-CM	Diagnosis	Heart laceration with penetration of heart chambers and open wound into thorax
861.2	ICD-9-CM	Diagnosis	Lung injury, without mention of open wound into thorax
861.20	ICD-9-CM	Diagnosis	Unspecified lung injury without mention of open wound into thorax
861.21	ICD-9-CM	Diagnosis	Lung contusion without mention of open wound into thorax
861.22	ICD-9-CM	Diagnosis	Lung laceration without mention of open wound into thorax
861.3	ICD-9-CM	Diagnosis	Lung injury, with open wound into thorax
861.30	ICD-9-CM	Diagnosis	Unspecified lung injury with open wound into thorax
861.31	ICD-9-CM	Diagnosis	Lung contusion with open wound into thorax
861.32	ICD-9-CM	Diagnosis	Lung laceration with open wound into thorax
862	ICD-9-CM	Diagnosis	Injury to other and unspecified intrathoracic organs
862.0	ICD-9-CM	Diagnosis	Diaphragm injury without mention of open wound into cavity
862.1	ICD-9-CM	Diagnosis	Diaphragm injury with open wound into cavity
862.2	ICD-9-CM	Diagnosis	Injury to other specified intrathoracic organs without mention of open wound into
862.21	ICD-9-CM	Diagnosis	Bronchus injury without mention of open wound into cavity
862.22	ICD-9-CM	Diagnosis	Esophagus injury without mention of open wound into cavity
862.29	ICD-9-CM	Diagnosis	Injury to other specified intrathoracic organs without mention of open wound into
862.3	ICD-9-CM	Diagnosis	Injury to other specified intrathoracic organs with open wound into cavity
862.31	ICD-9-CM	Diagnosis	Bronchus injury with open wound into cavity
862.32	ICD-9-CM	Diagnosis	Esophagus injury with open wound into cavity
862.39	ICD-9-CM	Diagnosis	Injury to other specified intrathoracic organs with open wound into cavity
862.8	ICD-9-CM	Diagnosis	Injury to multiple and unspecified intrathoracic organs without mention of open
862.9	ICD-9-CM	Diagnosis	Injury to multiple and unspecified intrathoracic organs with open wound into
863	ICD-9-CM	Diagnosis	Gastrointestinal tract injury
863.0	ICD-9-CM	Diagnosis	Stomach injury without mention of open wound into cavity
863.1	ICD-9-CM	Diagnosis	Stomach injury with open wound into cavity
863.2	ICD-9-CM	Diagnosis	Small intestine injury without mention of open wound into cavity



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

Code	Code Type	Code Category	Description
863.20			Small intestine injury, unspecified site, without mention of open wound into cavity
863.21		_	Duodenum injury without mention of open wound into cavity
863.29	ICD-9-CM	Diagnosis	Other injury to small intestine without mention of open wound into cavity
863.3	ICD-9-CM	Diagnosis	Small intestine injury with open wound into cavity
863.30	ICD-9-CM	Diagnosis	Small intestine injury, unspecified site, with open wound into cavity
863.31	ICD-9-CM	Diagnosis	Duodenum injury with open wound into cavity
863.39	ICD-9-CM	Diagnosis	Other injury to small intestine with open wound into cavity
863.4	ICD-9-CM	Diagnosis	Colon or rectal injury without mention of open wound into cavity
863.40	ICD-9-CM	Diagnosis	Colon injury unspecified site, without mention of open wound into cavity
863.41	ICD-9-CM	Diagnosis	Ascending (right) colon injury without mention of open wound into cavity
863.42	ICD-9-CM	Diagnosis	Transverse colon injury without mention of open wound into cavity
863.43	ICD-9-CM	Diagnosis	Descending (left) colon injury without mention of open wound into cavity
863.44	ICD-9-CM	Diagnosis	Sigmoid colon injury without mention of open wound into cavity
863.45	ICD-9-CM	Diagnosis	Rectum injury without mention of open wound into cavity
863.46	ICD-9-CM	Diagnosis	Injury to multiple sites in colon and rectum without mention of open wound into
863.49	ICD-9-CM	Diagnosis	Other colon and rectum injury, without mention of open wound into cavity
863.5	ICD-9-CM	Diagnosis	Injury to colon or rectum with open wound into cavity
863.50	ICD-9-CM	Diagnosis	Colon injury, unspecified site, with open wound into cavity
863.51	ICD-9-CM	Diagnosis	Ascending (right) colon injury with open wound into cavity
863.52	ICD-9-CM	Diagnosis	Transverse colon injury with open wound into cavity
863.53	ICD-9-CM	Diagnosis	Descending (left) colon injury with open wound into cavity
863.54	ICD-9-CM	Diagnosis	Sigmoid colon injury with open wound into cavity
863.55	ICD-9-CM	Diagnosis	Rectum injury with open wound into cavity
863.56	ICD-9-CM	Diagnosis	Injury to multiple sites in colon and rectum with open wound into cavity
863.59	ICD-9-CM	Diagnosis	Other injury to colon and rectum with open wound into cavity
863.8	ICD-9-CM	Diagnosis	Injury to other and unspecified gastrointestinal sites without mention of open
863.80	ICD-9-CM	Diagnosis	Gastrointestinal tract injury, unspecified site, without mention of open wound into
863.81	ICD-9-CM	Diagnosis	Pancreas head injury without mention of open wound into cavity
863.82	ICD-9-CM	Diagnosis	Pancreas body injury without mention of open wound into cavity
863.83	ICD-9-CM	Diagnosis	Pancreas tail injury without mention of open wound into cavity
863.84	ICD-9-CM	Diagnosis	Pancreas injury, multiple and unspecified sites, without mention of open wound
863.85	ICD-9-CM	Diagnosis	Appendix injury without mention of open wound into cavity
863.89	ICD-9-CM	Diagnosis	Injury to other and unspecified gastrointestinal sites without mention of open
863.9	ICD-9-CM	Diagnosis	Injury to other and unspecified gastrointestinal sites, with open wound into cavity
863.90	ICD-9-CM	Diagnosis	Gastrointestinal tract injury, unspecified site, with open wound into cavity



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
863.91	ICD-9-CM	Diagnosis	Pancreas head injury with open wound into cavity
863.92	ICD-9-CM	Diagnosis	Pancreas body injury with open wound into cavity
863.93	ICD-9-CM	Diagnosis	Pancreas tail injury with open wound into cavity
863.94	ICD-9-CM	Diagnosis	Pancreas injury, multiple and unspecified sites, with open wound into cavity
863.95	ICD-9-CM	Diagnosis	Appendix injury with open wound into cavity
863.99	ICD-9-CM	Diagnosis	Injury to other and unspecified gastrointestinal sites with open wound into cavity
864	ICD-9-CM	Diagnosis	Injury to liver
864.0	ICD-9-CM	Diagnosis	Liver injury without mention of open wound into cavity
864.00	ICD-9-CM	Diagnosis	Unspecified injury to liver without mention of open wound into cavity
864.01	ICD-9-CM	Diagnosis	Liver hematoma and contusion without mention of open wound into cavity
864.02	ICD-9-CM	Diagnosis	Liver laceration, minor, without mention of open wound into cavity
864.03	ICD-9-CM	Diagnosis	Liver laceration, moderate, without mention of open wound into cavity
864.04	ICD-9-CM	Diagnosis	Liver laceration, major, without mention of open wound into cavity
864.05	ICD-9-CM	Diagnosis	Liver injury without mention of open wound into cavity, unspecified laceration
864.09	ICD-9-CM	Diagnosis	Other liver injury without mention of open wound into cavity
864.1	ICD-9-CM	Diagnosis	Liver injury with open wound into cavity
864.10	ICD-9-CM	Diagnosis	Unspecified liver injury with open wound into cavity
864.11	ICD-9-CM	Diagnosis	Liver hematoma and contusion with open wound into cavity
864.12	ICD-9-CM	Diagnosis	Liver laceration, minor, with open wound into cavity
864.13	ICD-9-CM	Diagnosis	Liver laceration, moderate, with open wound into cavity
864.14	ICD-9-CM	Diagnosis	Liver laceration, major, with open wound into cavity
864.15	ICD-9-CM	Diagnosis	Liver injury with open wound into cavity, unspecified laceration
864.19	ICD-9-CM	Diagnosis	Other liver injury with open wound into cavity
865	ICD-9-CM	Diagnosis	Injury to spleen
865.0	ICD-9-CM	Diagnosis	Spleen injury without mention of open wound into cavity
865.00	ICD-9-CM	Diagnosis	Unspecified spleen injury without mention of open wound into cavity
865.01	ICD-9-CM	Diagnosis	Spleen hematoma, without rupture of capsule or mention of open wound into
865.02	ICD-9-CM	Diagnosis	Capsular tears to spleen, without major disruption of parenchyma or mention of open wound into cavity
865.03	ICD-9-CM	Diagnosis	Spleen laceration extending into parenchyma without mention of open wound into cavity
865.04	ICD-9-CM	Diagnosis	Massive parenchymal disruption of spleen without mention of open wound into
865.09	ICD-9-CM	Diagnosis	Other spleen injury without mention of open wound into cavity
865.1	ICD-9-CM	Diagnosis	Spleen injury with open wound into cavity
865.10		_	Unspecified spleen injury with open wound into cavity
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Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
865.11	ICD-9-CM	Diagnosis	Spleen hematoma, without rupture of capsule, with open wound into cavity
865.12	ICD-9-CM	Diagnosis	Capsular tears to spleen, without major disruption of parenchyma, with open
865.13	ICD-9-CM	Diagnosis	Spleen laceration extending into parenchyma, with open wound into cavity
865.14	ICD-9-CM	Diagnosis	Massive parenchyma disruption of spleen with open wound into cavity
865.19	ICD-9-CM	Diagnosis	Other spleen injury with open wound into cavity
866	ICD-9-CM	Diagnosis	Injury to kidney
866.0	ICD-9-CM	Diagnosis	Kidney injury without mention of open wound into cavity
866.00	ICD-9-CM	Diagnosis	Unspecified kidney injury without mention of open wound into cavity
866.01	ICD-9-CM	Diagnosis	Kidney hematoma without rupture of capsule or mention of open wound into
866.02	ICD-9-CM	Diagnosis	Kidney laceration without mention of open wound into cavity
866.03	ICD-9-CM	Diagnosis	Complete disruption of kidney parenchyma, without mention of open wound into
866.1	ICD-9-CM	Diagnosis	Kidney injury with open wound into cavity
866.10	ICD-9-CM	Diagnosis	Unspecified kidney injury with open wound into cavity
866.11	ICD-9-CM	Diagnosis	Kidney hematoma, without rupture of capsule, with open wound into cavity
866.12	ICD-9-CM	Diagnosis	Kidney laceration with open wound into cavity
866.13	ICD-9-CM	Diagnosis	Complete disruption of kidney parenchyma, with open wound into cavity
867	ICD-9-CM	Diagnosis	Injury to pelvic organs
867.0	ICD-9-CM	Diagnosis	Bladder and urethra injury without mention of open wound into cavity
867.1	ICD-9-CM	Diagnosis	Bladder and urethra injury with open wound into cavity
867.2	ICD-9-CM	Diagnosis	Ureter injury without mention of open wound into cavity
867.3	ICD-9-CM	Diagnosis	Ureter injury with open wound into cavity
867.4	ICD-9-CM	Diagnosis	Uterus injury without mention of open wound into cavity
867.5	ICD-9-CM	Diagnosis	Uterus injury with open wound into cavity
867.6	ICD-9-CM	Diagnosis	Injury to other specified pelvic organs without mention of open wound into cavity
867.7	ICD-9-CM	Diagnosis	Injury to other specified pelvic organs with open wound into cavity
867.8	ICD-9-CM	Diagnosis	Injury to unspecified pelvic organ without mention of open wound into cavity
867.9	ICD-9-CM	Diagnosis	Injury to unspecified pelvic organ with open wound into cavity
868	ICD-9-CM	Diagnosis	Injury to other intra-abdominal organs
868.0	ICD-9-CM	Diagnosis	Injury to other intra-abdominal organs without mention of open wound into cavity
868.00	ICD-9-CM	Diagnosis	Injury to unspecified intra-abdominal organ without mention of open wound into
868.01	ICD-9-CM	Diagnosis	Adrenal gland injury without mention of open wound into cavity
868.02	ICD-9-CM	Diagnosis	Bile duct and gallbladder injury without mention of open wound into cavity
868.03	ICD-9-CM	Diagnosis	Peritoneum injury without mention of open wound into cavity
868.04	ICD-9-CM	Diagnosis	Retroperitoneum injury without mention of open wound into cavity



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
868.09	ICD-9-CM	Diagnosis	Injury to other and multiple intra-abdominal organs without mention of open
868.1	ICD-9-CM	Diagnosis	Injury to other intra-abdominal organs with open wound into cavity
868.10	ICD-9-CM	Diagnosis	Injury to unspecified intra-abdominal organ, with open wound into cavity
868.11	ICD-9-CM	Diagnosis	Adrenal gland injury, with open wound into cavity
868.12	ICD-9-CM	Diagnosis	Bile duct and gallbladder injury, with open wound into cavity
868.13	ICD-9-CM	Diagnosis	Peritoneum injury with open wound into cavity
868.14	ICD-9-CM	Diagnosis	Retroperitoneum injury with open wound into cavity
868.19	ICD-9-CM	Diagnosis	Injury to other and multiple intra-abdominal organs, with open wound into cavity
869	ICD-9-CM	Diagnosis	Internal injury to unspecified or ill-defined organs
869.0	ICD-9-CM	Diagnosis	Internal injury to unspecified or ill-defined organs without mention of open wound
869.1	ICD-9-CM	Diagnosis	Internal injury to unspecified or ill-defined organs with open wound into cavity
870	ICD-9-CM	Diagnosis	Open wound of ocular adnexa
870.0	ICD-9-CM	Diagnosis	Laceration of skin of eyelid and periocular area
870.1	ICD-9-CM	Diagnosis	Laceration of eyelid, full-thickness, not involving lacrimal passages
870.2	ICD-9-CM	Diagnosis	Laceration of eyelid involving lacrimal passages
870.3	ICD-9-CM	Diagnosis	Penetrating wound of orbit, without mention of foreign body
870.4	ICD-9-CM	Diagnosis	Penetrating wound of orbit with foreign body
870.8	ICD-9-CM	Diagnosis	Other specified open wound of ocular adnexa
870.9	ICD-9-CM	Diagnosis	Unspecified open wound of ocular adnexa
890	ICD-9-CM	Diagnosis	Open wound of hip and thigh
890.0	ICD-9-CM	Diagnosis	Open wound of hip and thigh, without mention of complication
890.1	ICD-9-CM	Diagnosis	Open wound of hip and thigh, complicated
890.2	ICD-9-CM	Diagnosis	Open wound of hip and thigh, with tendon involvement
891	ICD-9-CM	Diagnosis	Open wound of knee, leg (except thigh), and ankle
891.0	ICD-9-CM	Diagnosis	Open wound of knee, leg (except thigh), and ankle, without mention of
891.1	ICD-9-CM	Diagnosis	Open wound of knee, leg (except thigh), and ankle, complicated
891.2	ICD-9-CM	Diagnosis	Open wound of knee, leg (except thigh), and ankle, with tendon involvement
892	ICD-9-CM	Diagnosis	Open wound of foot except toe(s) alone
892.0	ICD-9-CM	Diagnosis	Open wound of foot except toe(s) alone, without mention of complication
892.1	ICD-9-CM	Diagnosis	Open wound of foot except toe(s) alone, complicated
892.2	ICD-9-CM	Diagnosis	Open wound of foot except toe(s) alone, with tendon involvement
893.0	ICD-9-CM	Diagnosis	Open wound of toe(s), without mention of complication
893.1	ICD-9-CM	Diagnosis	Open wound of toe(s), complicated
893.2	ICD-9-CM	Diagnosis	Open wound of toe(s), with tendon involvement



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

Code	Code	
Type	Category	Description
ICD-9-CM	Diagnosis	Multiple and unspecified open wound of lower limb, without mention of
ICD-9-CM	Diagnosis	Multiple and unspecified open wound of lower limb, complicated
ICD-9-CM	Diagnosis	Multiple and unspecified open wound of lower limb, with tendon involvement
ICD-9-CM	Diagnosis	Traumatic amputation of toe(s) (complete) (partial), without mention of
ICD-9-CM	Diagnosis	Traumatic amputation of toe(s) (complete) (partial), complicated
ICD-9-CM	Diagnosis	Traumatic amputation of foot (complete) (partial), unilateral, without mention of complication
ICD-9-CM	Diagnosis	Traumatic amputation of foot (complete) (partial), unilateral, complicated
ICD-9-CM	Diagnosis	Traumatic amputation of foot (complete) (partial), bilateral, without mention of complication
ICD-9-CM	Diagnosis	Traumatic amputation of foot (complete) (partial), bilateral, complicated
ICD-9-CM	Diagnosis	Traumatic amputation of leg(s) (complete) (partial), unilateral, below knee, without mention of complication
ICD-9-CM	Diagnosis	Traumatic amputation of leg(s) (complete) (partial), unilateral, below knee, complicated
ICD-9-CM	Diagnosis	Traumatic amputation of leg(s) (complete) (partial), unilateral, at or above knee, without mention of complication
ICD-9-CM	Diagnosis	Traumatic amputation of leg(s) (complete) (partial), unilateral, at or above knee, complicated
ICD-9-CM	Diagnosis	
ICD-9-CM	Diagnosis	Traumatic amputation of leg(s) (complete) (partial), unilateral, level not specified, complicated
ICD-9-CM	Diagnosis	Traumatic amputation of leg(s) (complete) (partial), bilateral (any level), without mention of complication
ICD-9-CM	Diagnosis	Traumatic amputation of leg(s) (complete) (partial), bilateral (any level), complicated
ICD-9-CM	Diagnosis	Crushing injury of face and scalp
ICD-9-CM	Diagnosis	Crushing injury of neck
ICD-9-CM	Diagnosis	Crushing injury of trunk
ICD-9-CM	Diagnosis	Crushing injury of external genitalia
ICD-9-CM	Diagnosis	Crushing injury of other specified sites of trunk
ICD-9-CM	Diagnosis	Crushing injury of back
ICD-9-CM	Diagnosis	Crushing injury of buttock
ICD-9-CM	Diagnosis	Crushing injury of other specified sites of trunk
ICD-9-CM	Diagnosis	Crushing injury of multiple sites of trunk
	Type ICD-9-CM IC	Type Category ICD-9-CM Diagnosis



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
927	ICD-9-CM	Diagnosis	Crushing injury of upper limb
927.0	ICD-9-CM	Diagnosis	Crushing injury of shoulder and upper arm
927.00	ICD-9-CM	Diagnosis	Crushing injury of shoulder region
927.01	ICD-9-CM	Diagnosis	Crushing injury of scapular region
927.02	ICD-9-CM	Diagnosis	Crushing injury of axillary region
927.03	ICD-9-CM	Diagnosis	Crushing injury of upper arm
927.09	ICD-9-CM	Diagnosis	Crushing injury of multiple sites of upper arm
927.1	ICD-9-CM	Diagnosis	Crushing injury of elbow and forearm
927.10	ICD-9-CM	Diagnosis	Crushing injury of forearm
927.11	ICD-9-CM	Diagnosis	Crushing injury of elbow
927.2	ICD-9-CM	Diagnosis	Crushing injury of wrist and hand(s), except finger(s) alone
927.20	ICD-9-CM	Diagnosis	Crushing injury of hand(s)
927.21	ICD-9-CM	Diagnosis	Crushing injury of wrist
927.3	ICD-9-CM	Diagnosis	Crushing injury of finger(s)
927.8	ICD-9-CM	Diagnosis	Crushing injury of multiple sites of upper limb
927.9	ICD-9-CM	Diagnosis	Crushing injury of unspecified site of upper limb
929	ICD-9-CM	Diagnosis	Crushing injury of multiple and unspecified sites
929.0	ICD-9-CM	Diagnosis	Crushing injury of multiple sites, not elsewhere classified
929.9	ICD-9-CM	Diagnosis	Crushing injury of unspecified site
948.1	ICD-9-CM	Diagnosis	Burn (any degree) involving 10-19% of body surface
948.10	ICD-9-CM	Diagnosis	Burn (any degree) involving 10-19% of body surface with third degree burn of less than 10% or unspecified amount
948.11	ICD-9-CM	Diagnosis	Burn (any degree) involving 10-19% of body surface with third degree burn of 10-19%
948.2	ICD-9-CM	Diagnosis	Burn (any degree) involving 20-29% of body surface
948.20	ICD-9-CM	Diagnosis	Burn (any degree) involving 20-29% of body surface with third degree burn of less than 10% or unspecified amount
948.21	ICD-9-CM	Diagnosis	Burn (any degree) involving 20-29% of body surface with third degree burn of 10-19%
948.22	ICD-9-CM	Diagnosis	Burn (any degree) involving 20-29% of body surface with third degree burn of 20-29%
948.3	ICD-9-CM	Diagnosis	Burn (any degree) involving 30-39% of body surface
948.30	ICD-9-CM	Diagnosis	Burn (any degree) involving 30-39% of body surface with third degree burn of less than 10% or unspecified amount
948.31	ICD-9-CM	Diagnosis	Burn (any degree) involving 30-39% of body surface with third degree burn of 10-19%
948.32	ICD-9-CM	Diagnosis	Burn (any degree) involving 30-39% of body surface with third degree burn of 20-29%



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
948.33	ICD-9-CM	Diagnosis	Burn (any degree) involving 30-39% of body surface with third degree burn of 30-39%
948.4	ICD-9-CM	Diagnosis	Burn (any degree) involving 40-49% of body surface
948.40	ICD-9-CM	Diagnosis	Burn (any degree) involving 40-49% of body surface with third degree burn of less than 10% or unspecified amount
948.41	ICD-9-CM	Diagnosis	Burn (any degree) involving 40-49% of body surface with third degree burn of 10-19%
948.42	ICD-9-CM	Diagnosis	Burn (any degree) involving 40-49% of body surface with third degree burn of 20-29%
948.43	ICD-9-CM	Diagnosis	Burn (any degree) involving 40-49% of body surface with third degree burn of 30-39%
948.44	ICD-9-CM	Diagnosis	Burn (any degree) involving 40-49% of body surface with third degree burn of 40-49%
948.5	ICD-9-CM	Diagnosis	Burn (any degree) involving 50-59% of body surface
948.50	ICD-9-CM	Diagnosis	Burn (any degree) involving 50-59% of body surface with third degree burn of less than 10% or unspecified amount
948.51	ICD-9-CM	Diagnosis	Burn (any degree) involving 50-59% of body surface with third degree burn of 10-19%
948.52	ICD-9-CM	Diagnosis	Burn (any degree) involving 50-59% of body surface with third degree burn of 20-29%
948.53	ICD-9-CM	Diagnosis	Burn (any degree) involving 50-59% of body surface with third degree burn of 30-39%
948.54	ICD-9-CM	Diagnosis	Burn (any degree) involving 50-59% of body surface with third degree burn of 40-49%
948.55	ICD-9-CM	Diagnosis	Burn (any degree) involving 50-59% of body surface with third degree burn of 50-59%
948.6	ICD-9-CM	Diagnosis	Burn (any degree) involving 60-69% of body surface
948.60	ICD-9-CM	Diagnosis	Burn (any degree) involving 60-69% of body surface with third degree burn of less than 10% or unspecified amount
948.61	ICD-9-CM	Diagnosis	Burn (any degree) involving 60-69% of body surface with third degree burn of 10-19%
948.62	ICD-9-CM	Diagnosis	Burn (any degree) involving 60-69% of body surface with third degree burn of 20- 29%
948.63	ICD-9-CM	Diagnosis	Burn (any degree) involving 60-69% of body surface with third degree burn of 30-39%
948.64	ICD-9-CM	Diagnosis	Burn (any degree) involving 60-69% of body surface with third degree burn of 40-49%
948.65	ICD-9-CM	Diagnosis	Burn (any degree) involving 60-69% of body surface with third degree burn of 50-59%



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
948.66	ICD-9-CM	Diagnosis	Burn (any degree) involving 60-69% of body surface with third degree burn of 60-69%
948.7	ICD-9-CM	Diagnosis	Burn (any degree) involving 70-79% of body surface
948.70	ICD-9-CM	Diagnosis	Burn (any degree) involving 70-79% of body surface with third degree burn of less than 10% or unspecified amount
948.71	ICD-9-CM	Diagnosis	Burn (any degree) involving 70-79% of body surface with third degree burn of 10-19%
948.72	ICD-9-CM	Diagnosis	Burn (any degree) involving 70-79% of body surface with third degree burn of 20-29%
948.73	ICD-9-CM	Diagnosis	Burn (any degree) involving 70-79% of body surface with third degree burn of 30-39%
948.74	ICD-9-CM	Diagnosis	Burn (any degree) involving 70-79% of body surface with third degree burn of 40-49%
948.75	ICD-9-CM	Diagnosis	Burn (any degree) involving 70-79% of body surface with third degree burn of 50-59%
948.76	ICD-9-CM	Diagnosis	Burn (any degree) involving 70-79% of body surface with third degree burn of 60-69%
948.77	ICD-9-CM	Diagnosis	Burn (any degree) involving 70-79% of body surface with third degree burn of 70-79%
948.8	ICD-9-CM	Diagnosis	Burn (any degree) involving 80-89% of body surface
948.80	ICD-9-CM	Diagnosis	Burn (any degree) involving 80-89% of body surface with third degree burn of less than 10% or unspecified amount
948.81	ICD-9-CM	Diagnosis	Burn (any degree) involving 80-89% of body surface with third degree burn of 10-19%
948.82	ICD-9-CM	Diagnosis	Burn (any degree) involving 80-89% of body surface with third degree burn of 20-29%
948.83	ICD-9-CM	Diagnosis	Burn (any degree) involving 80-89% of body surface with third degree burn of 30-39%
948.84	ICD-9-CM	Diagnosis	Burn (any degree) involving 80-89% of body surface with third degree burn of 40-49%
948.85	ICD-9-CM	Diagnosis	Burn (any degree) involving 80-89% of body surface with third degree burn of 50-59%
948.86	ICD-9-CM	Diagnosis	Burn (any degree) involving 80-89% of body surface with third degree burn of 60-69%
948.87	ICD-9-CM	Diagnosis	Burn (any degree) involving 80-89% of body surface with third degree burn of 70-79%
948.88	ICD-9-CM	Diagnosis	Burn (any degree) involving 80-89% of body surface with third degree burn of 80-89%
948.9	ICD-9-CM	Diagnosis	Burn (any degree) involving 90% or more of body surface



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Туре	Category	Description
948.90	ICD-9-CM	Diagnosis	Burn (any degree) involving 90% or more of body surface with third degree burn of less than 10% or unspecified amount
948.91	ICD-9-CM	Diagnosis	Burn (any degree) involving 90% or more of body surface with third degree burn of $10\text{-}19\%$
948.92	ICD-9-CM	Diagnosis	Burn (any degree) involving 90% or more of body surface with third degree burn of $20\text{-}29\%$
948.93	ICD-9-CM	Diagnosis	Burn (any degree) involving 90% or more of body surface with third degree burn of $30\text{-}39\%$
948.94	ICD-9-CM	Diagnosis	Burn (any degree) involving 90% or more of body surface with third degree burn of $40\text{-}49\%$
948.95	ICD-9-CM	Diagnosis	Burn (any degree) involving 90% or more of body surface with third degree burn of $50\text{-}59\%$
948.96	ICD-9-CM	Diagnosis	Burn (any degree) involving 90% or more of body surface with third degree burn of $60\text{-}69\%$
948.97	ICD-9-CM	Diagnosis	Burn (any degree) involving 90% or more of body surface with third degree burn of $70\text{-}79\%$
948.98	ICD-9-CM	Diagnosis	Burn (any degree) involving 90% or more of body surface with third degree burn of $80\text{-}89\%$
948.99	ICD-9-CM	Diagnosis	Burn (any degree) involving 90% or more of body surface with third degree burn of 90% or more of body surface
952.0	ICD-9-CM	Diagnosis	Cervical spinal cord injury without evidence of spinal bone injury
952.00	ICD-9-CM	Diagnosis	C1-C4 level spinal cord injury, unspecified
952.01	ICD-9-CM	Diagnosis	C1-C4 level with complete lesion of spinal cord
952.02	ICD-9-CM	Diagnosis	C1-C4 level with anterior cord syndrome
952.03	ICD-9-CM	Diagnosis	C1-C4 level with central cord syndrome
952.04	ICD-9-CM	Diagnosis	C1-C4 level with other specified spinal cord injury
952.05	ICD-9-CM	Diagnosis	C5-C7 level spinal cord injury, unspecified
952.06	ICD-9-CM	Diagnosis	C5-C7 level with complete lesion of spinal cord
952.07	ICD-9-CM	Diagnosis	C5-C7 level with anterior cord syndrome
952.08	ICD-9-CM	Diagnosis	C5-C7 level with central cord syndrome
952.09	ICD-9-CM	Diagnosis	C5-C7 level with other specified spinal cord injury
952.1	ICD-9-CM	Diagnosis	Dorsal (thoracic) spinal cord injury without evidence of spinal bone injury
952.10	ICD-9-CM	Diagnosis	T1-T6 level spinal cord injury, unspecified
952.11	ICD-9-CM	Diagnosis	T1-T6 level with complete lesion of spinal cord
952.12	ICD-9-CM	Diagnosis	T1-T6 level with anterior cord syndrome
952.13	ICD-9-CM	Diagnosis	T1-T6 level with central cord syndrome
952.14	ICD-9-CM	Diagnosis	T1-T6 level with other specified spinal cord injury
952.15	ICD-9-CM	Diagnosis	T7-T12 level spinal cord injury, unspecified
952.16	ICD-9-CM	Diagnosis	T7-T12 level with complete lesion of spinal cord
952.17	ICD-9-CM	Diagnosis	T7-T12 level with anterior cord syndrome



Appendix D. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology, Fourth Edition (CPT-4) Diagnosis and Procedure Codes Used to Define Covariates in this Request

	Code	Code	
Code	Type	Category	Description
952.18	ICD-9-CM	Diagnosis	T7-T12 level with central cord syndrome
952.19	ICD-9-CM	Diagnosis	T7-T12 level with other specified spinal cord injury
952.2	ICD-9-CM	Diagnosis	Lumbar spinal cord injury without spinal bone injury
952.3	ICD-9-CM	Diagnosis	Sacral spinal cord injury without spinal bone injury
952.4	ICD-9-CM	Diagnosis	Cauda equina spinal cord injury without spinal bone injury
952.8	ICD-9-CM	Diagnosis	Multiple sites of spinal cord injury without spinal bone injury
952.9	ICD-9-CM	Diagnosis	Unspecified site of spinal cord injury without spinal bone injury
978	ICD-9-CM	Diagnosis	Poisoning by bacterial vaccines
978.0	ICD-9-CM	Diagnosis	Poisoning by BCG vaccine
978.1	ICD-9-CM	Diagnosis	Poisoning by typhoid and paratyphoid vaccine
978.2	ICD-9-CM	Diagnosis	Poisoning by cholera vaccine
978.3	ICD-9-CM	Diagnosis	Poisoning by plague vaccine
978.4	ICD-9-CM	Diagnosis	Poisoning by tetanus vaccine
978.5	ICD-9-CM	Diagnosis	Poisoning by diphtheria vaccine
978.6	ICD-9-CM	Diagnosis	Poisoning by pertussis vaccine, including combinations with pertussis component
978.8	ICD-9-CM	Diagnosis	Poisoning by other and unspecified bacterial vaccines
978.9	ICD-9-CM	Diagnosis	Poisoning by mixed bacterial vaccines, except combinations with pertussis



Generic Name Brand Name

Generic Name	Brand Name
Anti-arrhythm	nics
amiodarone hcl	Cordarone IV
amiodarone hcl	Cordarone
amiodarone hcl	amiodarone
amiodarone hcl	Pacerone
amiodarone hcl	amiodarone (bulk)
disopyramide phosphate	Norpace CR
disopyramide phosphate	Norpace
disopyramide phosphate	disopyramide phosphate
dofetilide	Tikosyn
dronedarone hcl	Multaq
flecainide acetate	flecainide
flecainide acetate	Tambocor
ibutilide fumarate	Corvert
ibutilide fumarate	ibutilide fumarate
lidocaine	lidocaine
lidocaine	ELA-Max
lidocaine	ELA-Max 5
lidocaine	LMX 4
lidocaine	LMX 5
lidocaine	RectiCare
lidocaine	lidocaine (bulk)
lidocaine	Lidoderm
lidocaine	Anestafoam
lidocaine	Anecream
lidocaine	AneCream5
lidocaine	LidoPAIN
lidocaine	Topicaine
lidocaine	Lidocream
lidocaine	Lidosense 4
lidocaine	Lidosense 5
lidocaine	LC-5
lidocaine	LC-4
lidocaine	Lidovex
mexiletine hcl	mexiletine
mexiletine hcl	Mexitil
mexiletine hcl	mexiletine (bulk)
moricizine hcl	Ethmozine
phenytoin	Dilantin Infatabs
phenytoin	Dilantin-125
phenytoin	phenytoin
phenytoin	phenytoin (bulk)
procainamide hcl	Pronestyl
procainamide hcl	Pronestyl-SR
procainamide hcl	Procanbid



Generic Name	Brand Name
procainamide hcl	procainamide
propafenone hcl	Rythmol
propafenone hcl	Rythmol SR
propafenone hcl	propafenone
quinidine sulfate	quinidine sulfate
quinidine sulfate	Quinidex Extentabs
quinidine sulfate	quinidine sulfate (bulk)
tocainide hcl	Tonocard
acetazolamide	acetazolamide (bulk)
acetazolamide	acetazolamide
acetazolamide	Diamox Sequels
acetazolamide sodium	acetazolamide sodium
carbamazepine	carbamazepine (bulk)
carbamazepine	Tegretol XR
carbamazepine	carbamazepine
carbamazepine	Equetro
carbamazepine	Carbatrol
carbamazepine	Tegretol
carbamazepine	Epitol
clobazam	Onfi
clonazepam	Klonopin
clonazepam	clonazepam
clonazepam	clonazepam (bulk)
clorazepate dipotassium	clorazepate dipotassium
clorazepate dipotassium	Tranxene T-Tab
clorazepate dipotassium	Tranxene-SD
diazepam	diazepam
diazepam	Valium
diazepam	diazepam (bulk)
diazepam	Diastat AcuDial
diazepam	Diazepam Intensol
diazepam	Diastat
divalences sodium	divalproex
divalproex sodium	Depakote
divalproex sodium	Depakote ER
divalproex sodium	Depakote Sprinkles
eslicarbazepine acetate ethosuximide	Aptiom ethosuximide
ethosuximide	
ethosuximide	Zarontin
	ethosuximide (bulk)
ethotoin ezogabine	Peganone Potiga
felbamate	felbamate
felbamate	Felbatol
gabapentin	gabapentin



Generic Name	Brand Name
gabapentin	Neurontin
gabapentin	gabapentin (bulk)
gabapentin	Gabarone
gabapentin	Gralise
gabapentin	Gralise 30-Day Starter Pack
gabapentin	Fanatrex
gabapentin enacarbil	Horizant
gabapentin/dietary supplement, misc combo no.11	Therapentin-60
gabapentin/dietary supplement, misc combo no.11	Therapentin-90
lacosamide	Vimpat
lamotrigine	lamotrigine
lamotrigine	Lamictal
lamotrigine	Lamictal XR
lamotrigine	Lamictal ODT
lamotrigine	lamotrigine (bulk)
lamotrigine	Lamictal Starter (Blue) Kit
lamotrigine	Lamictal Starter (Orange) Kit
lamotrigine	Lamictal ODT Starter (Orange)
lamotrigine	Lamictal ODT Starter (Blue)
lamotrigine	Lamictal Starter (Green) Kit
lamotrigine	Lamictal XR Starter (Green)
lamotrigine	Lamictal XR Starter (Orange)
lamotrigine	Lamictal ODT Starter (Green)
lamotrigine	Lamictal XR Starter (Blue)
levetiracetam	levetiracetam
levetiracetam	Keppra
levetiracetam	Keppra XR
levetiracetam	levetiracetam (bulk)
levetiracetam in sodium chloride, iso-osmotic	levetiracetam in NaCl (iso-os)
lorazepam	lorazepam
lorazepam	lorazepam (bulk)
lorazepam	Ativan
lorazepam	Lorazepam Intensol
lorazepam in 0.9 % sodium chloride	lorazepam in 0.9% sod chloride
lorazepam/dextrose 5 % in water	lorazepam in dextrose 5 %
methazolamide	Neptazane
methazolamide	methazolamide
midazolam hcl	midazolam
midazolam hcl in 0.9 % sodium chloride	midazolam in 0.9 % NaCl
midazolam hcl in 0.9 % sodium chloride/pf	midazolam (PF) in 0.9 % NaCl
midazolam hcl in dextrose 5% in water	midazolam in dextrose 5 %
midazolam hcl/dextrose 5%-water/pf	midazolam in dextrose 5 % (PF)
midazolam hcl/pf	midazolam (PF)
oxcarbazepine	Trileptal
oxcarbazepine	oxcarbazepine



Generic Name	Brand Name
oxcarbazepine	Oxtellar XR
perampanel	Fycompa
phenobarbital	phenobarbital
phenobarbital	phenobarbital (bulk)
phenobarbital sodium	Luminal
phenobarbital sodium	phenobarbital sodium
phenobarbital sodium in 0.9 % sodium chloride	phenobarbital in 0.9 % Sod Chl
phentermine hcl/topiramate	Qsymia
phenytoin sodium	phenytoin sodium
phenytoin sodium	phenytoin sodium (bulk)
phenytoin sodium extended	phenytoin sodium extended
phenytoin sodium extended	Dilantin Kapseal
phenytoin sodium extended	Phenytek
phenytoin sodium extended	Dilantin Extended
phenytoin sodium extended	Dilantin
pregabalin	Lyrica
pregabalin	pregabalin (bulk)
primidone	primidone
primidone	Mysoline
primidone	primidone (bulk)
rufinamide	Banzel
temazepam	temazepam
temazepam	Restoril
temazepam/dietary supplement,misc.combo8	Strazepam
tiagabine hcl	Gabitril
tiagabine hcl	tiagabine
topiramate	Topamax
topiramate	topiramate
topiramate	Qudexy XR
topiramate	topiramate (bulk)
topiramate	Trokendi XR
topiramate	Topiragen
valproic acid	valproic acid
valproic acid	Stavzor
valproic acid	valproic acid (bulk)
valproic acid	Depakene
valproic acid (as sodium salt) (valproate sodium)	valproate sodium (bulk)
valproic acid (as sodium salt) (valproate sodium)	valproic acid (as sodium salt)
valproic acid (as sodium salt) (valproate sodium)	valproate sodium
valproic acid (as sodium salt) (valproate sodium)	Depacon
vigabatrin	Sabril
zonisamide	Zonegran
zonisamide	zonisamide
zonisamide	zonisamide (bulk)
acebutolol hcl	acebutolol



	Generic Name	Brand Name
•	acebutolol hcl	Sectral
	acebutolol hcl	acebutolol (bulk)
	aliskiren hemifumarate	Tekturna
	aliskiren hemifumarate/amlodipine besylate	Tekamlo
	aliskiren hemifumarate/amlodipine/hydrochlorothiazide	Amturnide
	aliskiren hemifumarate/hydrochlorothiazide	Tekturna HCT
	aliskiren/valsartan	Valturna
	amlodipine besylate/benazepril hcl	Lotrel
	amlodipine besylate/benazepril hcl	amlodipine-benazepril
	amlodipine besylate/olmesartan medoxomil	Azor
	amlodipine besylate/valsartan	amlodipine-valsartan
	amlodipine besylate/valsartan	Exforge
	amlodipine besylate/valsartan/hydrochlorothiazide	amlodipine-valsartan-hcthiazid
	amlodipine besylate/valsartan/hydrochlorothiazide	Exforge HCT
	atenolol	atenolol
	atenolol	Tenormin
	atenolol	atenolol (bulk)
	atenolol/chlorthalidone	Tenoretic 50
	atenolol/chlorthalidone	atenolol-chlorthalidone
	atenolol/chlorthalidone	Tenoretic 100
	benazepril hcl	benazepril
	benazepril hcl	Lotensin
	benazepril hcl	benazepril HCl (bulk)
	benazepril hcl/hydrochlorothiazide	benazepril-hydrochlorothiazide
	benazepril hcl/hydrochlorothiazide	Lotensin HCT
	betaxolol hcl	betaxolol
	betaxolol hcl	Betoptic S
	betaxolol hcl	Kerlone
	bisoprolol fumarate	bisoprolol fumarate
	bisoprolol fumarate	Zebeta
	bisoprolol fumarate/hydrochlorothiazide	bisoprolol-hydrochlorothiazide
	bisoprolol fumarate/hydrochlorothiazide	Ziac
	buflomedil hcl	buflomedil (bulk)
	candesartan cilexetil	Atacand
	candesartan cilexetil	candesartan
	candesartan cilexetil/hydrochlorothiazide	candesartan-hydrochlorothiazid
	candesartan cilexetil/hydrochlorothiazide	Atacand HCT
	captopril	captopril
	captopril	captopril (bulk)
	captopril	Capoten
	captopril/hydrochlorothiazide	captopril-hydrochlorothiazide
	captopril/hydrochlorothiazide	Capozide
	carteolol hcl	carteolol
	carvedilol	carvedilol
	carvedilol	Coreg



Generic Name	Brand Name
carvedilol phosphate	Coreg CR
clonidine	Catapres-TTS-2
clonidine	Catapres-TTS-1
clonidine	clonidine
clonidine	Catapres-TTS-3
clonidine hcl	clonidine HCl (bulk)
clonidine hcl	clonidine HCl
clonidine hcl	Nexiclon XR
clonidine hcl	Catapres
clonidine hcl	Kapvay Dose Pack
clonidine hcl	Kapvay
clonidine hcl/chlorthalidone	Clorpres
clonidine hcl/pf	Duraclon (PF)
clonidine hcl/pf	clonidine (PF)
cyclandelate	cyclandelate
doxazosin mesylate	doxazosin
doxazosin mesylate	Cardura XL
doxazosin mesylate	Cardura
doxazosin mesylate	doxazosin mesylate (bulk)
enalapril maleate	enalapril maleate
enalapril maleate	Vasotec
enalapril maleate	enalapril maleate (bulk)
enalapril maleate	Epaned
enalapril maleate/felodipine	Lexxel
enalapril maleate/hydrochlorothiazide	enalapril-hydrochlorothiazide
enalapril maleate/hydrochlorothiazide	Vaseretic
enalaprilat dihydrate	enalaprilat
eprosartan mesylate	Teveten
eprosartan mesylate	eprosartan
eprosartan mesylate/hydrochlorothiazide	Teveten HCT
esmolol hcl	esmolol
esmolol hcl	Brevibloc
esmolol hcl in sodium chloride, iso-osmotic	Brevibloc in NaCl (iso-osm)
fenoldopam mesylate	Corlopam
fenoldopam mesylate	fenoldopam
fosinopril sodium	fosinopril
fosinopril sodium	Monopril
fosinopril sodium/hydrochlorothiazide	fosinopril-hydrochlorothiazide
fosinopril sodium/hydrochlorothiazide	Monopril HCT
guanabenz acetate	guanabenz (bulk)
guanabenz acetate	guanabenz
guanethidine sulfate	guanethidine
guanfacine hcl	guanfacine
guanfacine hcl	Tenex
guanfacine hcl	Intuniv ER



Generic Name	Brand Name

guanfacine hcl guanfacine (bulk) hydralazine hcl hydralazine

hydralazine hcl hydralazine HCl (bulk)

hydralazine hcl/hydrochlorothiazide Hydra-Zide

hydralazine hcl/reserpine/hydrochlorothiazide hydralazine-reserpin-hcthiazid

irbesartan irbesartan Avapro

irbesartan/hydrochlorothiazide irbesartan-hydrochlorothiazide

irbesartan/hydrochlorothiazide Avalide
isosorbide dinitrate/hydralazine hcl BiDil
isoxsuprine hcl isoxsuprine

isoxsuprine hcl isoxsuprine HCl (bulk)

isoxsuprine hcl Vasodilan labetalol hcl labetalol labetalol hcl **Trandate** labetalol hcl labetalol (bulk) labetalol hcl Normodyne lisinopril Zestril lisinopril lisinopril lisinopril Prinivil

lisinoprillisinopril (bulk)lisinopril/dietary supplement,comb.10Lytensoprillisinopril/dietary supplement,comb.10Lytensopril-90

lisinopril/hydrochlorothiazide lisinopril-hydrochlorothiazide

lisinopril/hydrochlorothiazidePrinzidelisinopril/hydrochlorothiazideZestoreticlosartan potassiumCozaarlosartan potassiumlosartan

losartan potassium/hydrochlorothiazide losartan-hydrochlorothiazide

losartan potassium/hydrochlorothiazide Hyzaar methyldopa methyldopa

methyldopa/hydrochlorothiazide methyldopa-hydrochlorothiazide

methyldopate hcl methyldopate metoprolol succinate Toprol XL

metoprolol succinate metoprolol succinate

metoprolol succinate/hydrochlorothiazide Dutoprol

metoprolol tartrate metoprolol tartrate metoprolol tartrate (bulk)

metoprolol tartrate Lopressor metoprolol tartrate/dietary supplement,comb.10 Hypertensolol

metoprolol tartrate/hydrochlorothiazide metoprolol ta-hydrochlorothiaz

metoprolol tartrate/hydrochlorothiazide Lopressor HCT metyrosine Demser minoxidil minoxidil (bulk

minoxidil minoxidil (bulk)
minoxidil minoxidil



Generic Name	Brand Name
minoxidil	Renewal
minoxidil	Rogaine
minoxidil	Rogaine Extra Strength for Men
minoxidil	Hair Regrowth Treatment
minoxidil	Hair Regrowth For Men
minoxidil	Hair Regrowth
minoxidil	Hair Regrowth For Women
minoxidil	Men's X-Str Hair Regrowth Tmnt
moexipril hcl	moexipril
moexipril hcl	Univasc
moexipril hcl/hydrochlorothiazide	moexipril-hydrochlorothiazide
moexipril hcl/hydrochlorothiazide	Uniretic
nadolol	nadolol
nadolol	Corgard
nadolol	nadolol (bulk)
nadolol/bendroflumethiazide	Corzide
nadolol/bendroflumethiazide	nadolol-bendroflumethiazide
nebivolol hcl	Bystolic
nitroprusside sodium	Nitropress
nylidrin hcl	nylidrin (bulk)
olmesartan medoxomil	Benicar
olmesartan medoxomil/amlodipine besylate/hydrochloro	ot Tribenzor
olmesartan medoxomil/hydrochlorothiazide	Benicar HCT
papaverine hcl	papaverine (bulk)
papaverine hcl	papaverine
papaverine hcl	Para-Time
penbutolol sulfate	Levatol
perindopril erbumine	Aceon
perindopril erbumine	perindopril erbumine
phenoxybenzamine hcl	phenoxybenzamine
phenoxybenzamine hcl	phenoxybenzamine (bulk)
phenoxybenzamine hcl	Dibenzyline
phentolamine mesylate	phentolamine
pindolol	pindolol
prazosin hcl	prazosin
prazosin hcl	Minipress
prazosin hcl/polythiazide	Minizide
propranolol hcl	propranolol
propranolol hcl	Inderal
propranolol hcl	InnoPran XL
propranolol hcl	propranolol (bulk)
propranolol hcl	Inderal LA
propranolol hcl	Inderal XL
propranolol hel	Hemangeol
propranolol hcl/hydrochlorothiazide	propranolol-hydrochlorothiazid



Generic Name	Brand Name
propranolol hcl/hydrochlorothiazide	Inderide
quinapril hcl	quinapril
quinapril hcl	Accupril
quinapril hcl/hydrochlorothiazide	quinapril-hydrochlorothiazide
quinapril hcl/hydrochlorothiazide	Accuretic
quinapril hcl/hydrochlorothiazide	Quinaretic
ramipril	ramipril
ramipril	Altace
reserpine	reserpine (bulk)
reserpine	reserpine
sotalol hcl	Sotalol AF
sotalol hcl	sotalol
sotalol hcl	Betapace
sotalol hcl	Betapace AF
sotalol hcl	Sorine
sotalol hcl	Sotylize
telmisartan	telmisartan
telmisartan	Micardis
telmisartan/amlodipine besylate	telmisartan-amlodipine
telmisartan/amlodipine besylate	Twynsta
telmisartan/hydrochlorothiazide	telmisartan-hydrochlorothiazid
telmisartan/hydrochlorothiazide	Micardis HCT
terazosin hcl	terazosin
terazosin hcl	Hytrin
timolol	Betimol
timolol maleate	Istalol
timolol maleate	timolol maleate
timolol maleate	Timoptic
timolol maleate	Timoptic-XE
timolol maleate	timolol maleate (bulk)
timolol maleate/pf	Timoptic Ocudose (PF)
tolazoline hcl	tolazoline (bulk)
trandolapril	trandolapril
trandolapril	Mavik
trandolapril/verapamil hcl	Tarka
trandolapril/verapamil hcl	trandolapril-verapamil
valsartan	valsartan
valsartan	Diovan
amiloride hcl	Midamor
amiloride hcl	amiloride
chlorthalidone	Hygroton
chlorthalidone	chlorthalidone
chlorthalidone	Thalitone
clonidine hcl/chlorthalidone	Combipres-1
clonidine hcl/chlorthalidone	Combipres-2



Generic Name	Brand Name
clonidine hcl/chlorthalidone	clonidine-chlorthalidone
furosemide	furosemide
furosemide	Lasix
furosemide	furosemide (bulk)
hydrochlorothiazide	hydrochlorothiazide
, hydrochlorothiazide	HydroDiuril
hydrochlorothiazide	Oretic
hydrochlorothiazide	Esidrix
hydrochlorothiazide	hydrochlorothiazide (bulk)
hydrochlorothiazide	Carozide
hydrochlorothiazide	Microzide
hydrochlorothiazide	Aquazide-H
metolazone	metolazone
metolazone	Zaroxolyn
metolazone	Mykrox
spironolactone	Aldactone
spironolactone	spironolactone
spironolactone	spironolactone (bulk)
triamterene	Dyrenium
triamterene	triamterene
triamterene/hydrochlorothiazide	Dyazide
triamterene/hydrochlorothiazide	triamterene-hydrochlorothiazid
triamterene/hydrochlorothiazide	Maxzide
triamterene/hydrochlorothiazide	Maxzide-25mg
acarbose	acarbose
acarbose	Precose
alogliptin benzoate	Nesina
alogliptin benzoate	alogliptin
alogliptin benzoate/metformin hcl	alogliptin-metformin
alogliptin benzoate/metformin hcl	Kazano
alogliptin benzoate/pioglitazone hcl	Oseni
alogliptin benzoate/pioglitazone hcl	alogliptin-pioglitazone
canagliflozin	Invokana
canagliflozin/metformin hcl	Invokamet
chlorpropamide	chlorpropamide
chlorpropamide	Diabinese
dapagliflozin propanediol/metformin hcl	Xigduo XR
glimepiride	glimepiride
glimepiride	Amaryl
glipizide	glipizide
glipizide	Glucotrol XL
glipizide	Glucotrol
glipizide/metformin hcl	glipizide-metformin
glipizide/metformin hcl	Metaglip

glyburide

glyburide



Generic Name	Brand Name
glyburide	Micronase
glyburide	Diabeta
glyburide,micronized	glyburide micronized
glyburide,micronized	Glynase
glyburide,micronized	Glycron
glyburide/metformin hcl	glyburide-metformin
glyburide/metformin hcl	Glucovance
linagliptin	Tradjenta
linagliptin/metformin hcl	Jentadueto
metformin hcl	metformin
metformin hcl	Glucophage XR
metformin hcl	Glucophage
metformin hcl	Glumetza
metformin hcl	Riomet
metformin hcl	Fortamet
miglitol	Glyset
nateglinide	Starlix
nateglinide	nateglinide
pioglitazone hcl	pioglitazone
pioglitazone hcl	Actos
pioglitazone hcl/glimepiride	pioglitazone-glimepiride
pioglitazone hcl/glimepiride	DUETACT
pioglitazone hcl/metformin hcl	Actoplus MET
pioglitazone hcl/metformin hcl	pioglitazone-metformin
pioglitazone hcl/metformin hcl	Actoplus Met XR
repaglinide	repaglinide
repaglinide	Prandin
repaglinide/metformin hcl	repaglinide-metformin
repaglinide/metformin hcl	Prandimet
rosiglitazone maleate	Avandia
rosiglitazone maleate/glimepiride	Avandaryl
rosiglitazone maleate/metformin hcl	Avandamet
saxagliptin hcl	Onglyza
saxagliptin hcl/metformin hcl	Kombiglyze XR
sitagliptin phosphate	Januvia
sitagliptin phosphate/metformin hcl	Janumet XR
sitagliptin phosphate/metformin hcl	Janumet
sitagliptin phosphate/simvastatin	Juvisync
tolazamide	tolazamide
tolbutamide	tolbutamide
dexlansoprazole	Dexilant
dexlansoprazole	Kapidex
esomeprazole magnesium	esomeprazole magnesium
esomeprazole magnesium	Nexium 24HR
esomeprazole magnesium	Nexium



Generic Name	Brand Name						
esomeprazole magnesium	Nexium Packet						
esomeprazole sodium	Nexium IV						
esomeprazole sodium	esomeprazole sodium						
lansoprazole	lansoprazole						
lansoprazole	Prevacid						
lansoprazole	Prevacid SoluTab						
lansoprazole	lansoprazole (bulk)						
lansoprazole	Heartburn Treatment 24 Hour						
lansoprazole	Prevacid 24Hr						
lansoprazole	FIRST-Lansoprazole						
lansoprazole	Prevacid IV						
lansoprazole	Heartburn Relief 24 Hour						
lansoprazole/amoxicillin trihydrate/clarithromycin	amoxicil-clarithromy-lansopraz						
lansoprazole/amoxicillin trihydrate/clarithromycin	Prevpac						
lansoprazole/naproxen	PREVACID NapraPAC						
naproxen/esomeprazole magnesium	Vimovo						
omeprazole	omeprazole						
omeprazole	omeprazole (bulk)						
omeprazole	Prilosec						
omeprazole	FIRST-Omeprazole						
omeprazole	Omeprazole+SyrSpend SF Alka						
omeprazole magnesium	Prilosec OTC						
omeprazole magnesium	omeprazole magnesium						
omeprazole/clarithromycin/amoxicillin trihydrate	Omeclamox-Pak						
omeprazole/sodium bicarbonate	omeprazole-sodium bicarbonate						
omeprazole/sodium bicarbonate	Zegerid						
omeprazole/sodium bicarbonate	Zegerid OTC						
pantoprazole sodium	Protonix						
pantoprazole sodium	pantoprazole						
rabeprazole sodium	AcipHex Sprinkle						
rabeprazole sodium	rabeprazole						
rabeprazole sodium	Aciphex						
citalopram hydrobromide	citalopram						
citalopram hydrobromide	Celexa						
desvenlafaxine	desvenlafaxine						
desvenlafaxine	Khedezla						
desvenlafaxine fumarate	desvenlafaxine fumarate						
desvenlafaxine succinate	Pristiq						
duloxetine hcl	duloxetine						
duloxetine hcl	Cymbalta						
duloxetine hcl	duloxetine HCl (bulk)						
duloxetine hcl	Irenka						
escitalopram oxalate	escitalopram oxalate						
escitalopram oxalate	Lexapro						
fluoxetine	fluoxetine (bulk)						



Generic Name	Brand Name
fluoxetine hcl	fluoxetine
fluoxetine hcl	Selfemra
fluoxetine hcl	Prozac Weekly
fluoxetine hcl	Prozac
fluoxetine hcl	Sarafem
fluoxetine hcl	Rapiflux
fluoxetine hcl/dietary supplement,misc comb17	Gaboxetine
fluoxetine hcl/dietary supplement,misc.combo8	Sentroxatine
fluvoxamine maleate	fluvoxamine
fluvoxamine maleate	Luvox CR
milnacipran hcl	Savella
nefazodone hcl	nefazodone
nefazodone hcl	Serzone
olanzapine/fluoxetine hcl	olanzapine-fluoxetine
olanzapine/fluoxetine hcl	Symbyax
paroxetine hcl	paroxetine HCl
paroxetine hcl	Paxil
paroxetine hcl	Paxil CR
paroxetine mesylate	Pexeva
paroxetine mesylate	Brisdelle
sertraline hcl	sertraline
sertraline hcl	Zoloft
sertraline hcl	sertraline (bulk)
venlafaxine hcl	venlafaxine
venlafaxine hcl	Effexor
venlafaxine hcl	Effexor XR
vilazodone hydrochloride	Viibryd
amlodipine besylate/atorvastatin calcium	Caduet
amlodipine besylate/atorvastatin calcium	amlodipine-atorvastatin
atorvastatin calcium	atorvastatin
atorvastatin calcium	Lipitor
ezetimibe/atorvastatin calcium	Liptruzet
ezetimibe/simvastatin	Vytorin 10-80
ezetimibe/simvastatin	Vytorin 10-10
ezetimibe/simvastatin	Vytorin 10-40
ezetimibe/simvastatin	Vytorin 10-20
fluvastatin sodium	Lescol
fluvastatin sodium	Lescol XL
fluvastatin sodium	fluvastatin
lovastatin	lovastatin
lovastatin	Altoprev
lovastatin	Mevacor
niacin/simvastatin	Simcor
pitavastatin calcium	Livalo
pravastatin sodium	pravastatin



Generic Name	Brand Name
pravastatin sodium	Pravachol
rosuvastatin calcium	Crestor
simvastatin	simvastatin
simvastatin	Zocor
simvastatin	simvastatin (bulk)



Appendix F. Specifications for Request ID: cder_ahr_wp007

This request uses execution of the Cohort Identification and Descriptive Analysis (CIDA) tool, version 3.0.3 with ad hoc coding, to evaluate the distribution of baseline characteristics for patients exposed to gadolinium-based contrast agent (GBCA) for an MRI in the Sentinel Distributed Database (SDD).

Enrollment Gap: 45 days

Age Groups: 2-17, 18-44, 45-64, 65+ Years **Query Period:** January 1, 2008 - July 31, 2015

Coverage Requirement: Drug and Medical

Pre-exposure enrollment (days): 183 Days

	Drug/Exposure*				In	Incidence Criteria Exclusion Criteria			Baseline	Event				
Scenario	MRI Location	Care Setting	Cohort Definition	Censor due to Evidence of Death	Washout (days)	Incident with respect to:	Incidence Care Setting	Pre-existing Condition	Care Setting	Include / Exclude	Lookback Period	Evaluation window (days)	Characteristics	Event
1	Extremity or Non- Extremity	Outpatient	Include only the first valid incident vaccination during the query period	Yes	183	Any MRI with contrast or with & without contrast	Any	Myocardical infarction, stroke, brain tumor, alzheimer's, autism spectrum disorder, illegal or legal drug overdose, head injury, kidney disease	Any	Exclude	-183, -1	183	See Appendices C and D	Dummy
	1.01 :0:		Ni d B					Head/neck MRI	Any	Exclude	0, 0	D 1 6		12.0C) I

International Classification of Diseases, Ninth Revision (ICD-9), International Classification of Diseases, Tenth Revision (ICD-10), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) codes are provided by Optum360.

National Drug Codes (NDC) are checked against First Data Bank's "National Drug Data File (NDDF®) Plus."