

## **STUDY PROTOCOL**

**Prospective Monitoring of Non-Vitamin K Oral Anticoagulants  
in Older Adults with Atrial Fibrillation and Frailty**

**Preparation or Update Date:**

**04/05/2021**

**Protocol Revision Summary**

<b>Date</b>	<b>Summary of Changes</b>
04/05/2021	Protocol preparation for study registration

## **BACKGROUND**

1. Non-vitamin K antagonist oral anticoagulants (NOACs) dabigatran, rivaroxaban, apixaban, and edoxaban for treatment of atrial fibrillation (AF)
  - a. Dabigatran – Approved October 19, 2010 (1)  
RE-LY Trial (Dabigatran vs Warfarin)
    - i. N=18,113, follow-up: 2.0y
    - ii. Composite event of stroke/non-CNS systemic embolism: 1.5%/y vs 1.7%/y (HR: 0.66; 95% CI: 0.53-0.82)
    - iii. Safety endpoints: Major bleeding: 2.7%/y vs 3.4%/y (HR: 0.93; 95% CI: 0.81-1.07)
  - b. Rivaroxaban – Approved July 1, 2011(2)  
ROCKET-AF Trial (Rivaroxaban vs Warfarin) (3)
    - i. N=14,264, Follow-up: 1.9y
    - ii. Composite event of stroke/non-CNS systemic embolism: 1.7%/y vs 2.2%/y (HR: 0.79; 95% CI: 0.66-0.96)
    - iii. Safety endpoints: Major bleeding: 3.6%/y vs 3.4%/y (HR: 1.04; 95% CI: 0.90-1.20)
  - c. Apixaban – Approved December 28, 2012 (4)  
ARISTOTLE (Apixaban vs Warfarin) (5)
    - i. N= 18,201, Follow-up: 1.8y
    - ii. Composite event of stroke/non-CNS systemic embolism: 1.3%/y vs 1.6%/y (HR: 0.79; 95% CI: 0.66-0.95)
    - iii. Safety endpoints: Major bleeding: 2.1%/y vs 3.1%/y (HR: 0.69; 95% CI: 0.60-0.80)
  - d. Edoxaban – Approved January 18, 2015 (6)  
ENGAGE AF-TIMI (Edoxaban vs Warfarin) (7)
    - i. N=21,105, Follow-up: 2.8y
    - ii. Composite event of stroke/non-CNS systemic embolism: 1.2%/y vs 1.5%/y (HR: 0.79; 95% CI: 0.63-0.99)
    - iii. Safety endpoints: Major bleeding: 2.8%/y vs 3.4%/y (HR: 0.80; 95% CI: 0.71-0.91)
2. Summary of 2019 ACC/AHA/ESC Guidelines for management of atrial fibrillation (8)
  - a. For patients with AF and an elevated CHA2DS2-VASc score of 2 or greater in men or 3 or greater in women, oral anticoagulants are recommended (Level of Evidence: A to B-R).

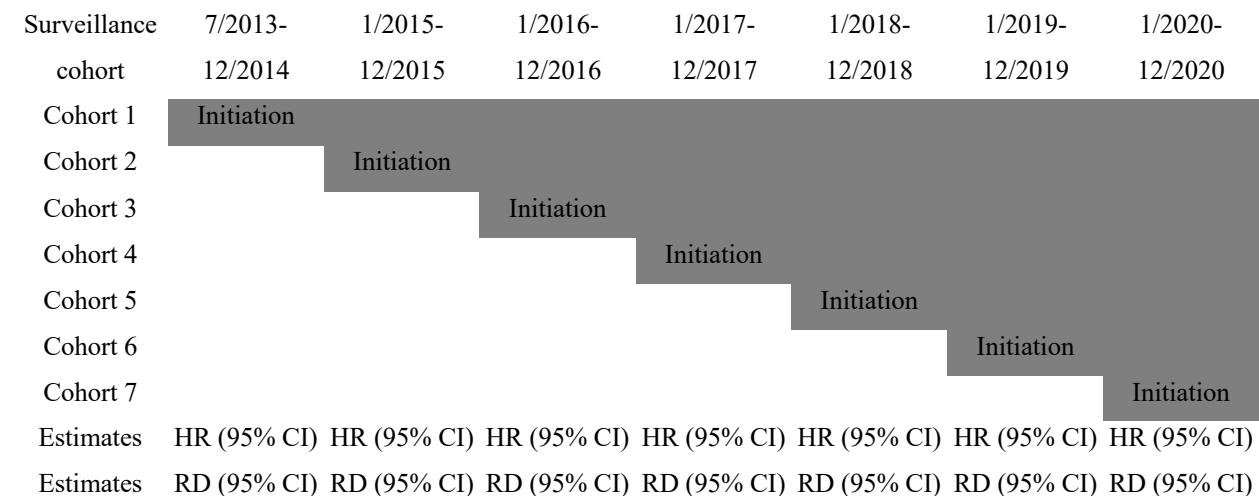
- b. NOACs (dabigatran, rivaroxaban, apixaban, and edoxaban) are recommended over warfarin in NOAC-eligible patients with AF (except with moderate-to-severe mitral stenosis or a mechanical heart valve) (Level of Evidence: A).
- c. In patients with AF (except with moderate-to-severe mitral stenosis or a mechanical heart valve), the CHA2DS2-VASc score is recommended for assessment of stroke risk (Level of Evidence: B).
- d. In patients with AF, anticoagulant therapy should be individualized on the basis of shared decision-making after discussion of the absolute risks and relative risks of stroke and bleeding, as well as the patient's values and preferences (Level of Evidence: C).
- e. For patients with AF (except with moderate- to-severe mitral stenosis or a mechanical heart valve) and a CHA2DS2-VASc score of 0 in men or 1 in women, it is reasonable to omit anticoagulant therapy (Level of Evidence: B).
- f. For patients with AF who have a CHA2DS2-VASc score of 2 or greater in men or 3 or greater in women and who have end-stage chronic kidney disease (CKD; creatinine clearance [CrCl] <15 mL/min) or are on dialysis, it might be reasonable to prescribe warfarin (INR 2.0 to 3.0) or apixaban for oral anticoagulation (Level of Evidence: B-NR).
- g. For patients with AF (except with moderate- to-severe mitral stenosis or a mechanical heart valve) and moderate-to-severe CKD (serum creatinine  $\geq$ 1.5 mg/dL [apixaban], CrCl 15 to 30 mL/min [dabigatran], CrCl  $\leq$ 50 mL/min [rivaroxaban], or CrCl 15 to 50 mL/ min [edoxaban]) with an elevated CHA2DS2- VASc score, treatment with reduced doses of direct thrombin or factor Xa inhibitors may be considered (eg, dabigatran, rivaroxaban, apixaban, or edoxaban) (Level of Evidence: B-R).
- h. For patients with AF (except with moderate- to-severe mitral stenosis or a mechanical heart valve) and a CHA2DS2-VASc score of 1 in men and 2 in women, prescribing an oral anticoagulant to reduce thromboembolic stroke risk may be considered (Level of evidence: C-LD).

## **STUDY OVERVIEW AND DESIGN**

1. Study aims: To emulate a prospective surveillance of the effectiveness and safety of NOACs vs a comparator (warfarin) in older adults with Atrial Fibrillation and different frailty status.
2. Data source(s):
  - a. Commercial data – Optum and MarketScan (2010-latest data available)

- b. Medicare data (2013-latest data available)
3. Study design (see Figure 1): The monitoring analysis will include 1) retrospective analysis of available data (2013-2018) at the time of first analysis (March 2021) and 2) prospective analysis of new data (2019-2020) as they become available to the researchers. Within each database and by frailty status (frail vs non-frail), we will emulate annual updating of data by creating a propensity score (PS)-matched cohort of new users every 1-year interval. Each sequential cohort will be followed for development of the outcomes of interest. At the end of each interval, time-to-event data from all sequential cohorts will be pooled for outcome analysis. The surveillance will be performed by frailty status (frail vs non-frail) at the time of drug initiation.

**Figure 1. Schematic of sequential monitoring design**

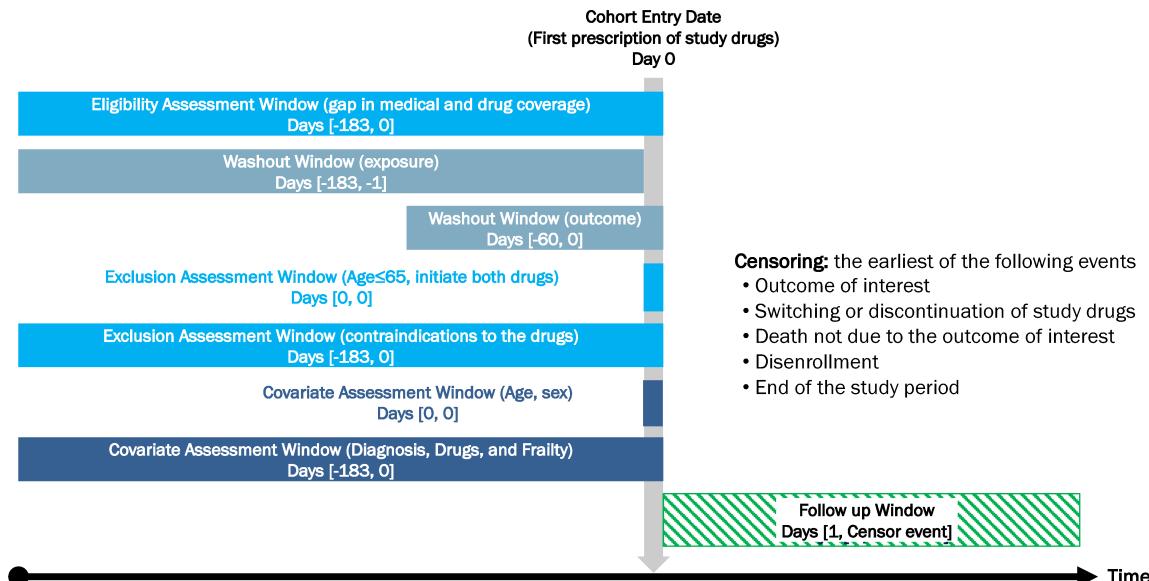


## STUDY POPULATION

1. Study population (see Figure 2) is created for each calendar interval and by frailty status for each NOAC vs warfarin comparison.
2. Initiation of NOAC or comparator (warfarin)
  - a. NOAC: any of dabigatran, rivaroxaban, apixaban, edoxaban
  - b. Index date (day 0): prescription fill from July 1, 2013
3. Assessment of eligibility (eligibility assessment window: [-183, 0] days) – See Appendix for list of codes. If a patient meets the eligibility criteria more than once, only the first record will be included.

- a. Continuous enrollment in medical and drug insurance (up to 30-day gap allowed; no HMO in Medicare data)
- b. Diagnosis of AF (CCW definition; outpatient diagnosis x2 or inpatient x1)
- c. CHA2DS2-VASc score  $\geq 2$  (moderate or high risk for stroke)
- d. No prior use of NOAC or warfarin (exposure wash-out window: [-183, -1] days)
- e. No recent hospitalization for stroke or major bleeding (outcome wash-out window: [-60, 0] days)
- f. No recent nursing facility stay: [-60, 0] days
  - i. Place of service: 31 (skilled nursing facility), 32 (nursing facility), 33 (custodial care facility)
  - ii. CPT codes: 99301, 99302, 99303, 99311, 99312, 99313, 99315, 99316, 99379, 99380, G0066
- g. Excluded if age  $< 65$  years or exposure to both drugs on day 0
- h. Contraindication to either drug (exclusion assessment window: [-183, 0] days)
  - i. Valvular heart disease or mechanical heart valve
  - ii. Intracranial or retroperitoneal hemorrhage
  - iii. Chronic kidney disease stage V, end-stage renal disease, or dialysis
  - iv. Other indications for anticoagulation therapy (venous thromboembolism or joint replacement)

**Figure 2. Study design outline for comparative effectiveness and safety analysis**



## **MEASUREMENTS**

1. Exposure to NOAC or comparator (each NOAC analyzed separately)
  - a. NOAC: dabigatran, rivaroxaban, apixaban, or edoxaban
  - b. Warfarin (comparator)
  - c. Exposure risk window and gap between treatments allowed: 3 days (primary analysis) or 5 days (sensitivity analysis)
2. Outcomes
  - a. Effectiveness endpoints:
    - i. a composite of stroke or systemic embolism (primary)
  - b. Safety endpoints:
    - i. Major bleeding (primary)
    - ii. All-cause mortality
3. Covariates
  - a. Sociodemographic information: age, sex, race, dual eligibility (for Medicare data)
  - b. Diseases: Chronic Conditions Data Warehouse (CCW) chronic conditions (see Table 2), provided in the Medicare Beneficiary Summary File (first date of satisfying the claims-based algorithm for individual conditions is available; considered present if this date is earlier than the index date)
  - c. Fall history: any fall diagnosis codes
  - d. Prescription drugs: selected ATC3 classes (chosen based on prevalence in a representative Medicare population)
  - e. CHA2DS2-VASc score
  - f. HAS-BLED score (9)
  - g. Gagne combined comorbidity score (10)
  - h. Claims-based frailty index (11): Frailty status will be defined as non-frail if  $<0.20$  or frail if  $\geq0.20$
  - i. Health care utilization: number of hospitalization days – calculated from inpatient dataset; number of skilled nursing facility days – calculated from skilled nursing facility dataset

**Table 2. CCW Chronic Conditions (12)**

Acquired Hypothyroidism	Chronic Kidney Disease
Acute Myocardial Infarction	Chronic Obstructive Pulmonary Disease
Alzheimer's Disease, Related Disorders, or Senile Dementia	Depression
Anemia	Diabetes
Asthma	Glaucoma
Heart failure	Hip / Pelvic Fracture
Benign Prostatic Hyperplasia	Hyperlipidemia
Cancer (any of the following): Cancer, Colorectal Cancer, Endometrial Cancer, Breast Cancer, Lung Cancer, Prostate	Hypertension Ischemic Heart Disease Osteoporosis Rheumatoid Arthritis / Osteoarthritis Stroke / Transient Ischemic Attack
Cataract	

## STATISTICAL ANALYSIS

### Estimation of treatment effectiveness and safety within each database

1. Monitoring framework: Monitoring framework: We will emulate annual updating of data by dividing each database for each NOAC-warfarin comparison into consecutive 1-year intervals. The monitoring begins on July 1, 2013-December 31, 2014, and 1-year intervals afterwards. Within each interval, we will fit a propensity score (PS) model and find PS-matched pairs. As new data become available every year, we will identify additional PS-matched pairs. Each sequential cohort will be followed for development of the outcomes of interest. At the end of each interval, time-to-event data from all sequential cohorts will be analyzed. The surveillance will be performed by frailty status at the time of drug initiation. The signal for effectiveness and safety will be determined using the maximized sequential probability ratio test. (13)
2. PS analysis: PS model will be estimated by frailty status (frail vs non-frail) within each cohort. We will use logistic regression that estimates the probability of receiving the drug of interest as a function

of sociodemographic characteristics, diseases, prescription drugs, comorbidity index, frailty index, CHA2DS2-VASc score, HAS-BLED score, and indicators for each 1-year interval. We will perform a 1:1 ratio nearest-neighbor PS matching, with a caliper of 0.2 of the standard deviation of the logit PS (Austin et al. Pharm Stat. 2011;10:150-61). We will evaluate balance in covariates using standard mean difference (<0.1 is considered adequate balance) within each surveillance cohort.

3. Primary analysis for effectiveness and safety: We will estimate the rate difference and 95% confidence interval (CI) of the effectiveness and safety endpoints by frailty status (frail vs non-frail). We will also use Cox proportional hazards regression to estimate the hazard ratios (HR) and 95% CI by frailty status (frail vs non-frail). The follow-up will begin on day 1 and end on the day of development of the effectiveness or safety endpoints or the earliest of the following censoring events: switching or discontinuation of the study drug, death not due to the outcome of interest, disenrollment, and end of data period (see Figure 1). Proportional hazards assumptions will be checked using Schoenfeld residuals.
4. Subgroup analyses for primary endpoints:
  - a. Age (65-74 years vs  $\geq$ 75 years)
  - b. Sex
  - c. Race (Black vs non-Black)
  - d. Major multimorbidity burden/pattern (informed by latent class analysis)
  - e. Dementia (CCW definition)
  - f. Fall history
  - g. CHA2DS2-VASc ( $\geq$ 4 vs 2-3)
  - h. HAS-BLED ( $\geq$ 2 or <2)
5. Sensitivity analysis for primary effectiveness and safety endpoints:
  - a. “intention-to-treat” analysis with a maximum follow-up time of 1 year from the index date
  - b. Exposure risk window or grace period of 5 days

### **Estimation of the pooled treatment effectiveness and safety**

1. The treatment effect estimates from 3 databases will be combined using meta-analysis techniques. We will examine the heterogeneity of treatment effect using Cochrane Q statistics and I-square statistics. If there is no statistically significant evidence of treatment effect heterogeneity, we will use

inverse probability fixed-effects model to pool the database-specific estimates. If there is significant treatment effect heterogeneity, we will use random-effects model.

2. Reporting of prospective monitoring results: When a statistically significant signal is detected from the pooled analysis for the primary endpoints of effectiveness or safety from pre-specified interim analysis or at the end of the data period (12/31/2020), the findings will be reported.

## REFERENCES

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## **APPENDIX**

### **ATC Drug Class**

A02B DRUGS FOR PEPTIC ULCER AND GASTRO-OESOPHAGEAL REFLUX DISEASE (GORD)  
A06A DRUGS FOR CONSTIPATION  
A10A INSULINS AND ANALOGUES  
A10B BLOOD GLUCOSE LOWERING DRUGS, EXCL. INSULINS  
A11 VITAMINS  
A12B POTASSIUM SUPPLEMENTS  
B01A ANTITHROMBOTIC AGENTS  
B02A ANTIFIBRINOLYTICS  
B02B VITAMIN K AND OTHER HEMOSTATICS  
B03A IRON ANTIANEMIC PREPARATIONS  
B03B VITAMIN B12 AND FOLIC ACID  
B03X OTHER ANTIANEMIC PREPARATIONS in ATC  
B05A BLOOD AND RELATED PRODUCTS  
B05B IV solutions used in parenteral administration of fluids, electrolytes and nutrients  
C01A CARDIAC GLYCOSIDES  
C01B ANTIARRHYTHMICS, CLASS I AND III  
C01C CARDIAC STIMULANTS EXCL. CARDIAC GLYCOSIDES  
C01D VASODILATORS USED IN CARDIAC DISEASES  
C02D ARTERIOLAR SMOOTH MUSCLE, AGENTS ACTING ON  
C03A LOW-CEILING DIURETICS, THIAZIDES  
C03C HIGH-CEILING DIURETICS  
C03D POTASSIUM-SPARING DIURETICS  
C07 beta-Adrenergic Blocking Agents  
C08C SELECTIVE CALCIUM CHANNEL BLOCKERS WITH MAINLY VASCULAR EFFECTS  
C08D SELECTIVE CALCIUM CHANNEL BLOCKERS WITH DIRECT CARDIAC EFFECTS  
C09A ACE INHIBITORS, PLAIN  
C09B ACE INHIBITORS, COMBINATIONS  
C09C ANGIOTENSIN II RECEPTOR BLOCKERS (ARBs), PLAIN  
C09D ANGIOTENSIN II RECEPTOR BLOCKERS (ARBs), COMBINATIONS  
C09X OTHER AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM in ATC  
C10A LIPID MODIFYING AGENTS, PLAIN  
D03 PREPARATIONS FOR TREATMENT OF WOUNDS AND ULCERS  
G04B UROLOGICALS  
G04C DRUGS USED IN BENIGN PROSTATIC HYPERPLASIA  
H02A CORTICOSTEROIDS FOR SYSTEMIC USE, PLAIN  
H03A THYROID PREPARATIONS  
J01 ANTIBACTERIALS FOR SYSTEMIC USE  
J02 ANTIMYCOTICS FOR SYSTEMIC USE

J05 ANTIVIRALS FOR SYSTEMIC USE  
J07 VACCINES  
L01 ANTINEOPLASTIC AGENTS  
L02 ENDOCRINE THERAPY ANTINEOPLASTIC AND IMMUNOMODULATING AGENTS  
L03 IMMUNOSTIMULANTS  
L04 IMMUNOSUPPRESSANTS  
M01A ANTIINFLAMMATORY AND ANTRHEUMATIC PRODUCTS, NON-STEROIDS  
M03B MUSCLE RELAXANTS, CENTRALLY ACTING AGENTS  
M04A ANTIGOUT PREPARATIONS  
M05B DRUGS AFFECTING BONE STRUCTURE AND MINERALIZATION  
N02A OPIOID ANALGESICS  
N02B OTHER ANALGESICS AND ANTIPYRETICS in ATC  
N03A ANTIEPILEPTICS  
N04 ANTI-PARKINSON DRUGS  
N05A ANTIPSYCHOTICS  
N05B ANXIOLYTICS  
N05C HYPNOTICS AND SEDATIVES  
N06A ANTIDEPRESSANTS  
N06B PSYCHOSTIMULANTS, AGENTS USED FOR ADHD AND NOOTROPICS  
N06D ANTI-DEMENTIA DRUGS  
R03A ADRENERGICS, INHALANTS  
R03B OTHER DRUGS FOR OBSTRUCTIVE AIRWAY DISEASES, INHALANTS in ATC  
R03C ADRENERGICS FOR SYSTEMIC USE  
R03D OTHER SYSTEMIC DRUGS FOR OBSTRUCTIVE AIRWAY DISEASES in ATC  
R06A ANTIHISTAMINES FOR SYSTEMIC USE  
S01E ANTIGLAUCOMA PREPARATIONS AND MIOTICS

## Covariate and Outcome Codes

### Valvular Heart Disease/Mechanical Heart Valve

SOURCE	CODE	DESCRIPTION
ICD9DX	093.2	syphilitic endocarditis*
ICD9DX	093.20	syphil endocarditis nos
ICD9DX	093.21	syphilitic mitral valve
ICD9DX	093.22	syphilitic aortic valve
ICD9DX	093.23	syphil tricuspid valve
ICD9DX	093.24	syphil pulmonary valve
ICD9DX	394	diseases of mitral valve*
ICD9DX	394.0	mitral stenosis
ICD9DX	394.1	rheumatic mitral insuff
ICD9DX	394.2	mitral stenosis w insuff
ICD9DX	394.9	mitral valve dis nec/nos

ICD9DX	395	diseases of aortic valve*
ICD9DX	395.0	rheumat aortic stenosis
ICD9DX	395.1	rheumatic aortic insuff
ICD9DX	395.2	rheum aortic sten/insuff
ICD9DX	395.9	rheum aortic dis nec/nos
ICD9DX	396	mitral/aortic valve dis*
ICD9DX	396.0	mitral/aortic stenosis
ICD9DX	396.1	mitral stenos/aort insuf
ICD9DX	396.2	mitral insuf/aort stenos
ICD9DX	396.3	mitral/aortic val insuff
ICD9DX	396.8	mitr/aortic mult involv
ICD9DX	396.9	mitral/aortic v dis nos
ICD9DX	397.0	tricuspid valve disease
ICD9DX	397.1	rheum pulmon valve dis
ICD9DX	424.0	mitral valve disorder
ICD9DX	424.1	aortic valve disorder
ICD9DX	424.2	nonrheum tricusp val dis
ICD9DX	424.3	pulmonary valve disorder
ICD9DX	746.0	pulmonary valve anomaly*
ICD9DX	746.00	pulmonary valve anom nos
ICD9DX	746.01	cong pulmon valv atresia
ICD9DX	746.02	cong pulmon valve stenos
ICD9DX	746.09	pulmonary valve anom nec
ICD9DX	746.1	cong tricusp atres/sten
ICD9DX	746.2	ebstein's anomaly
ICD9DX	746.3	cong aorta valv stenosis
ICD9DX	746.4	cong aorta valv insuffic
ICD9DX	746.5	congen mitral stenosis
ICD9DX	746.6	cong mitral insufficienc
ICD9DX	996.02	malfunc prosth hrt valve
ICD9DX	996.71	comp-heart valve prosth
ICD9DX	V42.2	heart valve transplant
ICD9DX	V42.3	skin transplant status
ICD10DX	I05	Rheumatic mitral valve diseases
ICD10DX	I05.0	Rheumatic mitral stenosis
ICD10DX	I05.1	Rheumatic mitral insufficiency
ICD10DX	I05.2	Rheumatic mitral stenosis with insufficiency
ICD10DX	I05.8	Other rheumatic mitral valve diseases
ICD10DX	I05.9	Rheumatic mitral valve disease, unspecified
ICD10DX	I06	Rheumatic aortic valve diseases
ICD10DX	I06.0	Rheumatic aortic stenosis
ICD10DX	I06.1	Rheumatic aortic insufficiency
ICD10DX	I06.2	Rheumatic aortic stenosis with insufficiency
ICD10DX	I06.8	Other rheumatic aortic valve diseases
ICD10DX	I06.9	Rheumatic aortic valve disease, unspecified

ICD10DX	I07	Rheumatic tricuspid valve diseases
ICD10DX	I07.0	Rheumatic tricuspid stenosis
ICD10DX	I07.1	Rheumatic tricuspid insufficiency
ICD10DX	I07.2	Rheumatic tricuspid stenosis and insufficiency
ICD10DX	I07.8	Other rheumatic tricuspid valve diseases
ICD10DX	I07.9	Rheumatic tricuspid valve disease, unspecified
ICD10DX	I08	Multiple valve diseases
ICD10DX	I08.0	Rheumatic disorders of both mitral and aortic valves
ICD10DX	I08.1	Rheumatic disorders of both mitral and tricuspid valves
ICD10DX	I08.2	Rheumatic disorders of both aortic and tricuspid valves
ICD10DX	I08.3	Comb rheumatic disord of mitral, aortic and tricuspid valves
ICD10DX	I08.8	Other rheumatic multiple valve diseases
ICD10DX	I08.9	Rheumatic multiple valve disease, unspecified
ICD10DX	I34	Nonrheumatic mitral valve disorders
ICD10DX	I34.0	Nonrheumatic mitral (valve) insufficiency
ICD10DX	I34.1	Nonrheumatic mitral (valve) prolapse
ICD10DX	I34.2	Nonrheumatic mitral (valve) stenosis
ICD10DX	I34.8	Other nonrheumatic mitral valve disorders
ICD10DX	I34.9	Nonrheumatic mitral valve disorder, unspecified
ICD10DX	I35	Nonrheumatic aortic valve disorders
ICD10DX	I35.0	Nonrheumatic aortic (valve) stenosis
ICD10DX	I35.1	Nonrheumatic aortic (valve) insufficiency
ICD10DX	I35.2	Nonrheumatic aortic (valve) stenosis with insufficiency
ICD10DX	I35.8	Other nonrheumatic aortic valve disorders
ICD10DX	I35.9	Nonrheumatic aortic valve disorder, unspecified
ICD10DX	I36	Nonrheumatic tricuspid valve disorders
ICD10DX	I36.0	Nonrheumatic tricuspid (valve) stenosis
ICD10DX	I36.1	Nonrheumatic tricuspid (valve) insufficiency
ICD10DX	I36.2	Nonrheumatic tricuspid (valve) stenosis with insufficiency
ICD10DX	I36.8	Other nonrheumatic tricuspid valve disorders
ICD10DX	I36.9	Nonrheumatic tricuspid valve disorder, unspecified
ICD10DX	I37	Nonrheumatic pulmonary valve disorders
ICD10DX	I37.0	Nonrheumatic pulmonary valve stenosis
ICD10DX	I37.1	Nonrheumatic pulmonary valve insufficiency
ICD10DX	I37.2	Nonrheumatic pulmonary valve stenosis with insufficiency
ICD10DX	I37.8	Other nonrheumatic pulmonary valve disorders
ICD10DX	I37.9	Nonrheumatic pulmonary valve disorder, unspecified
ICD10DX	I39	Endocarditis and heart valve disord in dis classd elswhr
ICD10DX	Q22	Congenital malformations of pulmonary and tricuspid valves
ICD10DX	Q22.0	Pulmonary valve atresia
ICD10DX	Q22.1	Congenital pulmonary valve stenosis
ICD10DX	Q22.2	Congenital pulmonary valve insufficiency
ICD10DX	Q22.3	Other congenital malformations of pulmonary valve
ICD10DX	Q22.4	Congenital tricuspid stenosis
ICD10DX	Q22.5	Ebstein's anomaly

ICD10DX	Q22.6	Hypoplastic right heart syndrome
ICD10DX	Q22.8	Other congenital malformations of tricuspid valve
ICD10DX	Q22.9	Congenital malformation of tricuspid valve, unspecified
ICD10DX	Q23	Congenital malformations of aortic and mitral valves
ICD10DX	Q23.0	Congenital stenosis of aortic valve
ICD10DX	Q23.1	Congenital insufficiency of aortic valve
ICD10DX	Q23.2	Congenital mitral stenosis
ICD10DX	Q23.3	Congenital mitral insufficiency
ICD10DX	Q23.4	Hypoplastic left heart syndrome
ICD10DX	Q23.8	Other congenital malformations of aortic and mitral valves
ICD10DX	Q23.9	Congenital malformation of aortic and mitral valves, unsp
ICD10DX	T82.0	Mechanical complication of heart valve prosthesis
ICD10DX	T82.01	Breakdown (mechanical) of heart valve prosthesis
ICD10DX	T82.01XA	Breakdown (mechanical) of heart valve prosthesis, init
ICD10DX	T82.01XD	Breakdown (mechanical) of heart valve prosthesis, subs
ICD10DX	T82.01XS	Breakdown (mechanical) of heart valve prosthesis, sequela
ICD10DX	T82.02	Displacement of heart valve prosthesis
ICD10DX	T82.02XA	Displacement of heart valve prosthesis, initial encounter
ICD10DX	T82.02XD	Displacement of heart valve prosthesis, subsequent encounter
ICD10DX	T82.02XS	Displacement of heart valve prosthesis, sequela
ICD10DX	T82.03	Leakage of heart valve prosthesis
ICD10DX	T82.03XA	Leakage of heart valve prosthesis, initial encounter
ICD10DX	T82.03XD	Leakage of heart valve prosthesis, subsequent encounter
ICD10DX	T82.03XS	Leakage of heart valve prosthesis, sequela
ICD10DX	T82.09	Other mechanical complication of heart valve prosthesis
ICD10DX	T82.09XA	Mech compl of heart valve prosthesis, initial encounter
ICD10DX	T82.09XD	Mech compl of heart valve prosthesis, subsequent encounter
ICD10DX	T82.09XS	Mech compl of heart valve prosthesis, sequela
ICD10DX	T82.22	Mechanical complication of biological heart valve graft
ICD10DX	T82.221	Breakdown (mechanical) of biological heart valve graft
ICD10DX	T82.221A	Breakdown (mechanical) of biological heart valve graft, init
ICD10DX	T82.221D	Breakdown (mechanical) of biological heart valve graft, subs
ICD10DX	T82.221S	Breakdown of biological heart valve graft, sequela
ICD10DX	T82.222	Displacement of biological heart valve graft
ICD10DX	T82.222A	Displacement of biological heart valve graft, init encntr
ICD10DX	T82.222D	Displacement of biological heart valve graft, subs encntr
ICD10DX	T82.222S	Displacement of biological heart valve graft, sequela
ICD10DX	T82.223	Leakage of biological heart valve graft
ICD10DX	T82.223A	Leakage of biological heart valve graft, initial encounter
ICD10DX	T82.223D	Leakage of biological heart valve graft, subs encntr
ICD10DX	T82.223S	Leakage of biological heart valve graft, sequela
ICD10DX	T82.228	Mech compl of biological heart valve graft
ICD10DX	T82.228A	Mech compl of biological heart valve graft, init encntr
ICD10DX	T82.228D	Mech compl of biological heart valve graft, subs encntr
ICD10DX	T82.228S	Mech compl of biological heart valve graft, sequela

ICD10DX	T82.6	Infect/inflm reaction due to cardiac valve prosthesis
ICD10DX	T82.6XXA	Infect/inflm reaction due to cardiac valve prosthesis, init
ICD10DX	T82.6XXD	Infect/inflm reaction due to cardiac valve prosthesis, subs
ICD10DX	T82.6XXS	Infect/inflm reaction due to cardiac valve prosth, sequela
ICD10DX	Z95.2	Presence of prosthetic heart valve
ICD10DX	Z95.3	Presence of xenogenic heart valve
ICD10DX	Z95.4	Presence of other heart-valve replacement

## CKD5, ESRD, or Dialysis

SOURCE	CODE	DESCRIPTION
ICD9DX	403.01	mal hyp kid w cr kid v
ICD9DX	403.11	ben hyp kid w cr kid v
ICD9DX	403.91	hyp kid nos w cr kid v
ICD9DX	585.5	chron kidney dis stage v
ICD9DX	585.6	end stage renal disease
ICD9DX	V45.1	renal dialysis status#
ICD9DX	V45.11	renal dialysis status
ICD9DX	V45.12	noncomplnt w renal dialys
ICD9DX	V56	dialysis encounter*
ICD9DX	V56.0	renal dialysis encounter
ICD9DX	V56.1	ft/adj xtrcorp dial cath
ICD9DX	V56.2	fit/adj perit dial cath
ICD9DX	V56.3	*
ICD9DX	V56.31	hemodialysis testing
ICD9DX	V56.32	peritoneal dialysis test
ICD9DX	V56.8	dialysis encounter, nec
ICD9PX	39.95	hemodialysis
ICD9PX	54.98	peritoneal dialysis
ICD10DX	I12.0	Hyp chr kidney disease w stage 5 chr kidney disease or ESRD
ICD10DX	I13.11	Hyp hrt and chr kdny dis w/o hrt fail, w stg 5 chr kdny/ESRD
ICD10DX	I13.2	Hyp hrt & chr kdny dis w hrt fail and w stg 5 chr kdny/ESRD
ICD10DX	N18.5	Chronic kidney disease, stage 5
ICD10DX	Y84.1	Kidney dialysis cause abn react/compl, w/o misadvnt
ICD10DX	Z49	Encounter for care involving renal dialysis
ICD10DX	Z49.0	Preparatory care for renal dialysis
ICD10DX	Z49.01	Encounter for fit/adjst of extracorporeal dialysis catheter
ICD10DX	Z49.02	Encounter for fit/adjst of peritoneal dialysis catheter
ICD10DX	Z49.3	Encounter for adequacy testing for dialysis
ICD10DX	Z49.31	Encounter for adequacy testing for hemodialysis
ICD10DX	Z49.32	Encounter for adequacy testing for peritoneal dialysis
ICD10DX	Z91.15	Patient's noncompliance with renal dialysis
ICD10DX	Z99.2	Dependence on renal dialysis
ICD10PX	3E1.M39Z	Irrigation of Periton Cav using Dialysate, Perc Approach
ICD10PX	5A1.D70Z	Performance of Urinary Filtration, <6 hrs/day

ICD10PX	5A1.D80Z	Performance of Urinary Filtration, 6-18 hrs/day
ICD10PX	5A1.D90Z	Performance of Urinary Filtration, >18 hrs/day

## Venous Thromboembolism

SOURCE	CODE	DESCRIPTION
ICD9DX	415.1	pulmon embolism/infarct*
ICD9DX	415.11	iatrogen pulm emb/infarc
ICD9DX	415.12	septic pulmonary embolsm
ICD9DX	415.13	saddle embol pulmon art
ICD9DX	415.19	pulm embol/infarct nec
ICD9DX	453	oth venous thrombosis*
ICD9DX	453.0	budd-chiari syndrome
ICD9DX	453.1	thrombophlebitis migrans
ICD9DX	453.2	oth inf vena cava thromb
ICD9DX	453.3	renal vein thrombosis
ICD9DX	453.4	*
ICD9DX	453.40	ac dvt/embl low ext nos
ICD9DX	453.41	ac dvt/emb prox low ext
ICD9DX	453.42	ac dvt/emb distl low ext
ICD9DX	453.5	*
ICD9DX	453.50	ch dvt/embl low ext nos
ICD9DX	453.51	ch dvt/embl prox low ext
ICD9DX	453.52	ch dvt/embl distl low ext
ICD9DX	453.6	embl suprfcl ves low ext
ICD9DX	453.7	*
ICD9DX	453.71	ch emblsm suprfcl up ext
ICD9DX	453.72	ch dvt/embl up ext
ICD9DX	453.73	ch emblsm up ext nos
ICD9DX	453.74	ch emblsm axillary veins
ICD9DX	453.75	ch emblsm subclav veins
ICD9DX	453.76	ch embl internl jug vein
ICD9DX	453.77	ch embl thorac vein nec
ICD9DX	453.79	ch emblsm veins nec
ICD9DX	453.8	venous thrombosis nec#
ICD9DX	453.81	ac embl suprfcl up ext
ICD9DX	453.82	ac dvt/embl up ext
ICD9DX	453.83	ac emblsm up ext nos
ICD9DX	453.84	ac emblsm axillary veins
ICD9DX	453.85	ac embl subclav veins
ICD9DX	453.86	ac embl internl jug vein
ICD9DX	453.87	ac embl thorac vein nec
ICD9DX	453.89	ac embolism veins nec
ICD9DX	453.9	venous thrombosis nos
ICD9DX	V12.51	hx-ven thrombosis/embols

ICD9DX	V12.55	hx pulmonary embolism
ICD10DX	I26	Pulmonary embolism
ICD10DX	I26.0	Pulmonary embolism with acute cor pulmonale
ICD10DX	I26.01	Septic pulmonary embolism with acute cor pulmonale
ICD10DX	I26.02	Saddle embolus of pulmonary artery with acute cor pulmonale
ICD10DX	I26.09	Other pulmonary embolism with acute cor pulmonale
ICD10DX	I26.9	Pulmonary embolism without acute cor pulmonale
ICD10DX	I26.90	Septic pulmonary embolism without acute cor pulmonale
ICD10DX	I26.92	Saddle embolus of pulmonary artery w/o acute cor pulmonale
ICD10DX	I26.93	Single subsegmental pulmon embolsm w/o acute cor pulmonale
ICD10DX	I26.94	Mult subsegmental pulmon emboli without acute cor pulmonale
ICD10DX	I26.99	Other pulmonary embolism without acute cor pulmonale
ICD10DX	I27.82	Chronic pulmonary embolism
ICD10DX	I80	Phlebitis and thrombophlebitis
ICD10DX	I80.0	Phlebitis and thombophlb of superficial vessels of low extrm
ICD10DX	I80.00	Phlbts and thombophlb of superfic vessels of unsp low extrm
ICD10DX	I80.01	Phlebitis and thombophlb of superfic vessels of r low extrem
ICD10DX	I80.02	Phlebitis and thombophlb of superfic vessels of l low extrem
ICD10DX	I80.03	Phlbts and thombophlb of superfic vessels of low extrm, bi
ICD10DX	I80.1	Phlebitis and thrombophlebitis of femoral vein
ICD10DX	I80.10	Phlebitis and thrombophlebitis of unspecified femoral vein
ICD10DX	I80.11	Phlebitis and thrombophlebitis of right femoral vein
ICD10DX	I80.12	Phlebitis and thrombophlebitis of left femoral vein
ICD10DX	I80.13	Phlebitis and thrombophlebitis of femoral vein, bilateral
ICD10DX	I80.2	Phlbts and thombophlb of and unsp deep vessels of low extrm
ICD10DX	I80.20	Phlebitis and thombophlb of unsp deep vessels of low extrm
ICD10DX	I80.201	Phlbts and thombophlb of unsp deep vessels of r low extrem
ICD10DX	I80.202	Phlbts and thombophlb of unsp deep vessels of l low extrem
ICD10DX	I80.203	Phlbts and thombophlb of unsp deep vessels of low extrm, bi
ICD10DX	I80.209	Phlbts and thombophlb of unsp deep vessels of unsp low extrm
ICD10DX	I80.21	Phlebitis and thrombophlebitis of iliac vein
ICD10DX	I80.211	Phlebitis and thrombophlebitis of right iliac vein
ICD10DX	I80.212	Phlebitis and thrombophlebitis of left iliac vein
ICD10DX	I80.213	Phlebitis and thrombophlebitis of iliac vein, bilateral
ICD10DX	I80.219	Phlebitis and thrombophlebitis of unspecified iliac vein
ICD10DX	I80.22	Phlebitis and thrombophlebitis of popliteal vein
ICD10DX	I80.221	Phlebitis and thrombophlebitis of right popliteal vein
ICD10DX	I80.222	Phlebitis and thrombophlebitis of left popliteal vein
ICD10DX	I80.223	Phlebitis and thrombophlebitis of popliteal vein, bilateral
ICD10DX	I80.229	Phlebitis and thrombophlebitis of unspecified popliteal vein
ICD10DX	I80.23	Phlebitis and thrombophlebitis of tibial vein
ICD10DX	I80.231	Phlebitis and thrombophlebitis of right tibial vein
ICD10DX	I80.232	Phlebitis and thrombophlebitis of left tibial vein
ICD10DX	I80.233	Phlebitis and thrombophlebitis of tibial vein, bilateral
ICD10DX	I80.239	Phlebitis and thrombophlebitis of unspecified tibial vein

ICD10DX	I80.24	Phlebitis and thrombophlebitis of peroneal vein
ICD10DX	I80.241	Phlebitis and thrombophlebitis of right peroneal vein
ICD10DX	I80.242	Phlebitis and thrombophlebitis of left peroneal vein
ICD10DX	I80.243	Phlebitis and thrombophlebitis of peroneal vein, bilateral
ICD10DX	I80.249	Phlebitis and thrombophlebitis of unspecified peroneal vein
ICD10DX	I80.25	Phlebitis and thrombophlebitis of calf muscular vein
ICD10DX	I80.251	Phlebitis and thrombophlebitis of right calf muscular vein
ICD10DX	I80.252	Phlebitis and thrombophlebitis of left calf muscular vein
ICD10DX	I80.253	Phlebitis and thrombophlebitis of calf muscular vein, bilateral
ICD10DX	I80.259	Phlebitis and thrombophlebitis of unspecified calf muscular vein
ICD10DX	I80.29	Phlebitis and thrombophlebitis of deep vessels of low extrem
ICD10DX	I80.291	Phlebitis and thrombophlebitis of deep vessels of r low extrem
ICD10DX	I80.292	Phlebitis and thrombophlebitis of deep vessels of l low extrem
ICD10DX	I80.293	Phlebitis and thrombophlebitis of deep vessels of low extrem, bi
ICD10DX	I80.299	Phlebitis and thrombophlebitis of deep vessels of unsp low extrem
ICD10DX	I80.3	Phlebitis and thrombophlebitis of lower extremities, unsp
ICD10DX	I80.8	Phlebitis and thrombophlebitis of other sites
ICD10DX	I80.9	Phlebitis and thrombophlebitis of unspecified site
ICD10DX	I81	Portal vein thrombosis
ICD10DX	I82	Other venous embolism and thrombosis
ICD10DX	I82.0	Budd-Chiari syndrome
ICD10DX	I82.1	Thrombophlebitis migrans
ICD10DX	I82.2	Embolism and thrombosis of vena cava and oth thoracic veins
ICD10DX	I82.21	Embolism and thrombosis of superior vena cava
ICD10DX	I82.210	Acute embolism and thrombosis of superior vena cava
ICD10DX	I82.211	Chronic embolism and thrombosis of superior vena cava
ICD10DX	I82.22	Embolism and thrombosis of inferior vena cava
ICD10DX	I82.220	Acute embolism and thrombosis of inferior vena cava
ICD10DX	I82.221	Chronic embolism and thrombosis of inferior vena cava
ICD10DX	I82.29	Embolism and thrombosis of other thoracic veins
ICD10DX	I82.290	Acute embolism and thrombosis of other thoracic veins
ICD10DX	I82.291	Chronic embolism and thrombosis of other thoracic veins
ICD10DX	I82.3	Embolism and thrombosis of renal vein
ICD10DX	I82.4	Acute embolism and thrombosis of deep veins of low extrem
ICD10DX	I82.40	Acute embolism and thombos unsp deep veins of low extrem
ICD10DX	I82.401	Acute embolism and thombos unsp deep veins of r low extrem
ICD10DX	I82.402	Acute embolism and thombos unsp deep veins of l low extrem
ICD10DX	I82.403	Acute embolism and thombos unsp deep veins of low extrem, bi
ICD10DX	I82.409	Acute embolism and thombos unsp deep vn unsp lower extremity
ICD10DX	I82.41	Acute embolism and thrombosis of femoral vein
ICD10DX	I82.411	Acute embolism and thrombosis of right femoral vein
ICD10DX	I82.412	Acute embolism and thrombosis of left femoral vein
ICD10DX	I82.413	Acute embolism and thrombosis of femoral vein, bilateral
ICD10DX	I82.419	Acute embolism and thrombosis of unspecified femoral vein
ICD10DX	I82.42	Acute embolism and thrombosis of iliac vein

ICD10DX	I82.421	Acute embolism and thrombosis of right iliac vein
ICD10DX	I82.422	Acute embolism and thrombosis of left iliac vein
ICD10DX	I82.423	Acute embolism and thrombosis of iliac vein, bilateral
ICD10DX	I82.429	Acute embolism and thrombosis of unspecified iliac vein
ICD10DX	I82.43	Acute embolism and thrombosis of popliteal vein
ICD10DX	I82.431	Acute embolism and thrombosis of right popliteal vein
ICD10DX	I82.432	Acute embolism and thrombosis of left popliteal vein
ICD10DX	I82.433	Acute embolism and thrombosis of popliteal vein, bilateral
ICD10DX	I82.439	Acute embolism and thrombosis of unspecified popliteal vein
ICD10DX	I82.44	Acute embolism and thrombosis of tibial vein
ICD10DX	I82.441	Acute embolism and thrombosis of right tibial vein
ICD10DX	I82.442	Acute embolism and thrombosis of left tibial vein
ICD10DX	I82.443	Acute embolism and thrombosis of tibial vein, bilateral
ICD10DX	I82.449	Acute embolism and thrombosis of unspecified tibial vein
ICD10DX	I82.45	Acute embolism and thrombosis of peroneal vein
ICD10DX	I82.451	Acute embolism and thrombosis of right peroneal vein
ICD10DX	I82.452	Acute embolism and thrombosis of left peroneal vein
ICD10DX	I82.453	Acute embolism and thrombosis of peroneal vein, bilateral
ICD10DX	I82.459	Acute embolism and thrombosis of unspecified peroneal vein
ICD10DX	I82.46	Acute embolism and thrombosis of calf muscular vein
ICD10DX	I82.461	Acute embolism and thrombosis of right calf muscular vein
ICD10DX	I82.462	Acute embolism and thrombosis of left calf muscular vein
ICD10DX	I82.463	Acute embolism and thrombos of calf muscular vein, bilateral
ICD10DX	I82.469	Acute embolism and thrombos unsp calf muscular vein
ICD10DX	I82.49	Acute embolism and thrombosis of deep vein of low extrem
ICD10DX	I82.491	Acute embolism and thrombosis of deep vein of r low extrem
ICD10DX	I82.492	Acute embolism and thrombosis of deep vein of l low extrem
ICD10DX	I82.493	Acute embolism and thrombos of deep vein of low extrm, bi
ICD10DX	I82.499	Acute embolism and thrombosis of deep vein of unsp low extrm
ICD10DX	I82.4Y	Acute emblsm and thombos unsp deep veins of prox low extrm
ICD10DX	I82.4Y1	Ac embolsm and thombos unsp deep veins of r prox low extrm
ICD10DX	I82.4Y2	Ac embolsm and thombos unsp deep veins of left prox low extrm
ICD10DX	I82.4Y3	Ac embolsm and thombos unsp deep veins of prox low extrm, bi
ICD10DX	I82.4Y9	Acute emblsm and thombos unsp deep vn unsp prox low extrm
ICD10DX	I82.4Z	Acute emblsm and thombos unsp deep veins of distal low extrm
ICD10DX	I82.4Z1	Ac embolsm and thombos unsp deep veins of r dist low extrm
ICD10DX	I82.4Z2	Ac embolsm and thombos unsp deep veins of left dist low extrm
ICD10DX	I82.4Z3	Ac embolsm and thombos unsp deep veins of dist low extrm, bi
ICD10DX	I82.4Z9	Acute emblsm and thombos unsp deep vn unsp distal low extrm
ICD10DX	I82.5	Chronic embolism and thrombosis of deep veins of low extrm
ICD10DX	I82.50	Chronic embolism and thombos unsp deep veins of low extrm
ICD10DX	I82.501	Chronic embolism and thombos unsp deep veins of r low extrem
ICD10DX	I82.502	Chronic embolism and thombos unsp deep veins of l low extrem
ICD10DX	I82.503	Chronic emblsm and thombos unsp deep veins of low extrm, bi
ICD10DX	I82.509	Chronic embolism and thombos unsp deep vn unsp low extrm

ICD10DX	I82.51	Chronic embolism and thrombosis of femoral vein
ICD10DX	I82.511	Chronic embolism and thrombosis of right femoral vein
ICD10DX	I82.512	Chronic embolism and thrombosis of left femoral vein
ICD10DX	I82.513	Chronic embolism and thrombosis of femoral vein, bilateral
ICD10DX	I82.519	Chronic embolism and thrombosis of unspecified femoral vein
ICD10DX	I82.52	Chronic embolism and thrombosis of iliac vein
ICD10DX	I82.521	Chronic embolism and thrombosis of right iliac vein
ICD10DX	I82.522	Chronic embolism and thrombosis of left iliac vein
ICD10DX	I82.523	Chronic embolism and thrombosis of iliac vein, bilateral
ICD10DX	I82.529	Chronic embolism and thrombosis of unspecified iliac vein
ICD10DX	I82.53	Chronic embolism and thrombosis of popliteal vein
ICD10DX	I82.531	Chronic embolism and thrombosis of right popliteal vein
ICD10DX	I82.532	Chronic embolism and thrombosis of left popliteal vein
ICD10DX	I82.533	Chronic embolism and thrombosis of popliteal vein, bilateral
ICD10DX	I82.539	Chronic embolism and thrombosis of unsp popliteal vein
ICD10DX	I82.54	Chronic embolism and thrombosis of tibial vein
ICD10DX	I82.541	Chronic embolism and thrombosis of right tibial vein
ICD10DX	I82.542	Chronic embolism and thrombosis of left tibial vein
ICD10DX	I82.543	Chronic embolism and thrombosis of tibial vein, bilateral
ICD10DX	I82.549	Chronic embolism and thrombosis of unspecified tibial vein
ICD10DX	I82.55	Chronic embolism and thrombosis of peroneal vein
ICD10DX	I82.551	Chronic embolism and thrombosis of right peroneal vein
ICD10DX	I82.552	Chronic embolism and thrombosis of left peroneal vein
ICD10DX	I82.553	Chronic embolism and thrombosis of peroneal vein, bilateral
ICD10DX	I82.559	Chronic embolism and thrombosis of unspecified peroneal vein
ICD10DX	I82.56	Chronic embolism and thrombosis of calf muscular vein
ICD10DX	I82.561	Chronic embolism and thrombosis of right calf muscular vein
ICD10DX	I82.562	Chronic embolism and thrombosis of left calf muscular vein
ICD10DX	I82.563	Chronic embolism and thombos of calf muscular vein, bi
ICD10DX	I82.569	Chronic embolism and thombos unsp calf muscular vein
ICD10DX	I82.59	Chronic embolism and thrombosis of deep vein of low extrm
ICD10DX	I82.591	Chronic embolism and thrombosis of deep vein of r low extrem
ICD10DX	I82.592	Chronic embolism and thrombosis of deep vein of l low extrem
ICD10DX	I82.593	Chronic embolism and thombos of deep vein of low extrm, bi
ICD10DX	I82.599	Chronic embolism and thombos of deep vein of unsp low extrm
ICD10DX	I82.5Y	Chronic emblsm and thombos unsp deep veins of prox low extrm
ICD10DX	I82.5Y1	Chr emblsm and thombos unsp deep veins of r prox low extrm
ICD10DX	I82.5Y2	Chr emblsm and thombos unsp deep vn of left prox low extrm
ICD10DX	I82.5Y3	Chr emblsm and thombos unsp deep veins of prox low extrm, bi
ICD10DX	I82.5Y9	Chronic emblsm and thombos unsp deep vn unsp prox low extrm
ICD10DX	I82.5Z	Chr emblsm and thombos unsp deep veins of distal low extrm
ICD10DX	I82.5Z1	Chr emblsm and thombos unsp deep veins of r dist low extrm
ICD10DX	I82.5Z2	Chr emblsm and thombos unsp deep vn of left dist low extrm
ICD10DX	I82.5Z3	Chr emblsm and thombos unsp deep veins of dist low extrm, bi
ICD10DX	I82.5Z9	Chr emblsm and thombos unsp deep vn unsp distal low extrm

ICD10DX	I82.6	Acute embolism and thrombosis of veins of upper extremity
ICD10DX	I82.60	Acute embolism and thombos unsp veins of upper extremity
ICD10DX	I82.601	Acute embolism and thombos unsp veins of r up extrem
ICD10DX	I82.602	Acute embolism and thombos unsp veins of l up extrem
ICD10DX	I82.603	Acute embolism and thombos unsp veins of up extrem, bi
ICD10DX	I82.609	Acute embolism and thombos unsp vn unsp upper extremity
ICD10DX	I82.61	Acute embolism and thrombosis of superfic veins of up extrem
ICD10DX	I82.611	Acute embolism and thombos of superfic veins of r up extrem
ICD10DX	I82.612	Acute embolism and thombos of superfic veins of l up extrem
ICD10DX	I82.613	Acute emblsm and thombos of superfic veins of up extrem, bi
ICD10DX	I82.619	Acute embolism and thrombosis of superfic vn unsp up extrem
ICD10DX	I82.62	Acute embolism and thrombosis of deep veins of up extrem
ICD10DX	I82.621	Acute embolism and thrombosis of deep veins of r up extrem
ICD10DX	I82.622	Acute embolism and thrombosis of deep veins of l up extrem
ICD10DX	I82.623	Acute embolism and thombos of deep veins of up extrem, bi
ICD10DX	I82.629	Acute embolism and thrombosis of deep vn unsp up extrem
ICD10DX	I82.7	Chronic embolism and thrombosis of veins of upper extremity
ICD10DX	I82.70	Chronic embolism and thombos unsp veins of upper extremity
ICD10DX	I82.701	Chronic embolism and thombos unsp veins of r up extrem
ICD10DX	I82.702	Chronic embolism and thombos unsp veins of l up extrem
ICD10DX	I82.703	Chronic embolism and thombos unsp veins of up extrem, bi
ICD10DX	I82.709	Chronic embolism and thombos unsp vn unsp upper extremity
ICD10DX	I82.71	Chronic embolism and thombos of superfic veins of up extrem
ICD10DX	I82.711	Chronic emblsm and thombos of superfic veins of r up extrem
ICD10DX	I82.712	Chronic emblsm and thombos of superfic veins of l up extrem
ICD10DX	I82.713	Chr emblsm and thombos of superfic veins of up extrem, bi
ICD10DX	I82.719	Chronic embolism and thombos of superfic vn unsp up extrem
ICD10DX	I82.72	Chronic embolism and thrombosis of deep veins of up extrem
ICD10DX	I82.721	Chronic embolism and thrombosis of deep veins of r up extrem
ICD10DX	I82.722	Chronic embolism and thrombosis of deep veins of l up extrem
ICD10DX	I82.723	Chronic embolism and thombos of deep veins of up extrem, bi
ICD10DX	I82.729	Chronic embolism and thrombosis of deep vn unsp up extrem
ICD10DX	I82.8	Embolism and thrombosis of other specified veins
ICD10DX	I82.81	Embolism and thrombosis of superficial veins of low extrm
ICD10DX	I82.811	Embolism and thrombosis of superficial veins of r low extrem
ICD10DX	I82.812	Embolism and thrombosis of superficial veins of l low extrem
ICD10DX	I82.813	Embolism and thombos of superfic veins of low extrm, bi
ICD10DX	I82.819	Embolism and thrombosis of superficial vn unsp low extrm
ICD10DX	I82.89	Embolism and thrombosis of other specified veins
ICD10DX	I82.890	Acute embolism and thrombosis of other specified veins
ICD10DX	I82.891	Chronic embolism and thrombosis of other specified veins
ICD10DX	I82.9	Embolism and thrombosis of unspecified vein
ICD10DX	I82.90	Acute embolism and thrombosis of unspecified vein
ICD10DX	I82.91	Chronic embolism and thrombosis of unspecified vein
ICD10DX	I82.A	Embolism and thrombosis of axillary vein

ICD10DX	I82.A1	Acute embolism and thrombosis of axillary vein
ICD10DX	I82.A11	Acute embolism and thrombosis of right axillary vein
ICD10DX	I82.A12	Acute embolism and thrombosis of left axillary vein
ICD10DX	I82.A13	Acute embolism and thrombosis of axillary vein, bilateral
ICD10DX	I82.A19	Acute embolism and thrombosis of unspecified axillary vein
ICD10DX	I82.A2	Chronic embolism and thrombosis of axillary vein
ICD10DX	I82.A21	Chronic embolism and thrombosis of right axillary vein
ICD10DX	I82.A22	Chronic embolism and thrombosis of left axillary vein
ICD10DX	I82.A23	Chronic embolism and thrombosis of axillary vein, bilateral
ICD10DX	I82.A29	Chronic embolism and thrombosis of unspecified axillary vein
ICD10DX	I82.B	Embolism and thrombosis of subclavian vein
ICD10DX	I82.B1	Acute embolism and thrombosis of subclavian vein
ICD10DX	I82.B11	Acute embolism and thrombosis of right subclavian vein
ICD10DX	I82.B12	Acute embolism and thrombosis of left subclavian vein
ICD10DX	I82.B13	Acute embolism and thrombosis of subclavian vein, bilateral
ICD10DX	I82.B19	Acute embolism and thrombosis of unspecified subclavian vein
ICD10DX	I82.B2	Chronic embolism and thrombosis of subclavian vein
ICD10DX	I82.B21	Chronic embolism and thrombosis of right subclavian vein
ICD10DX	I82.B22	Chronic embolism and thrombosis of left subclavian vein
ICD10DX	I82.B23	Chronic embolism and thrombosis of subclav vein, bilateral
ICD10DX	I82.B29	Chronic embolism and thrombosis of unsp subclavian vein
ICD10DX	I82.C	Embolism and thrombosis of internal jugular vein
ICD10DX	I82.C1	Acute embolism and thrombosis of internal jugular vein
ICD10DX	I82.C11	Acute embolism and thrombosis of right internal jugular vein
ICD10DX	I82.C12	Acute embolism and thrombosis of left internal jugular vein
ICD10DX	I82.C13	Acute embolism and thrombosis of int jugular vein, bilateral
ICD10DX	I82.C19	Acute embolism and thrombosis of unsp internal jugular vein
ICD10DX	I82.C2	Chronic embolism and thrombosis of internal jugular vein
ICD10DX	I82.C21	Chronic embolism and thrombosis of r int jugular vein
ICD10DX	I82.C22	Chronic embolism and thrombosis of l int jugular vein
ICD10DX	I82.C23	Chronic embolism and thombos of int jugular vein, bilateral
ICD10DX	I82.C29	Chronic embolism and thombos unsp internal jugular vein
ICD10DX	Z86.71	Personal history of venous thrombosis and embolism
ICD10DX	Z86.711	Personal history of pulmonary embolism
ICD10DX	Z86.718	Personal history of other venous thrombosis and embolism

## Joint Replacement

SOURCE	CODE	DESCRIPTION
ICD9PX	81.51	total hip replacement
ICD9PX	81.52	partial hip replacement
ICD9PX	81.54	total knee replacement
ICD10PX	0SR.9019	Replacement of R Hip Jt with Metal, Cement, Open Approach
ICD10PX	0SR.901A	Replacement of R Hip Jt with Metal, Uncement, Open Approach
ICD10PX	0SR.901Z	Replacement of Right Hip Joint with Metal, Open Approach

ICD10PX	0SR.9029	Replace R Hip Jt w Metal on Poly, Cement, Open
ICD10PX	0SR.902A	Replace R Hip Jt w Metal on Poly, Uncement, Open
ICD10PX	0SR.902Z	Replacement of R Hip Jt with Metal on Poly, Open Approach
ICD10PX	0SR.9039	Replacement of R Hip Jt with Ceramic, Cement, Open Approach
ICD10PX	0SR.903A	Replace of R Hip Jt with Ceramic, Uncement, Open Approach
ICD10PX	0SR.903Z	Replacement of Right Hip Joint with Ceramic, Open Approach
ICD10PX	0SR.9049	Replace R Hip Jt w Ceramic on Poly, Cement, Open
ICD10PX	0SR.904A	Replace R Hip Jt w Ceramic on Poly, Uncement, Open
ICD10PX	0SR.904Z	Replacement of R Hip Jt with Ceramic on Poly, Open Approach
ICD10PX	0SR.9069	Replace of R Hip Jt with Zirc on Poly, Cement, Open Approach
ICD10PX	0SR.906A	Replace R Hip Jt w Zirc on Poly, Uncement, Open
ICD10PX	0SR.906Z	Replacement of R Hip Jt with Zirc on Poly, Open Approach
ICD10PX	0SR.907Z	Replacement of Right Hip Joint with Autol Sub, Open Approach
ICD10PX	0SR.90EZ	Replacement of Right Hip Joint with Artc Spcr, Open Approach
ICD10PX	0SR.90J9	Replace of R Hip Jt with Synth Sub, Cement, Open Approach
ICD10PX	0SR.90JA	Replace of R Hip Jt with Synth Sub, Uncement, Open Approach
ICD10PX	0SR.90JZ	Replacement of Right Hip Joint with Synth Sub, Open Approach
ICD10PX	0SR.90KZ	Replacement of R Hip Jt with Nonaut Sub, Open Approach
ICD10PX	0SR.A009	Replace R Hip Jt, Acetab w Polyeth, Cement, Open
ICD10PX	0SR.A00A	Replace R Hip Jt, Acetab w Polyeth, Uncement, Open
ICD10PX	0SR.A00Z	Replacement of R Hip Jt, Acetab with Polyeth, Open Approach
ICD10PX	0SR.A019	Replace R Hip Jt, Acetab w Metal, Cement, Open
ICD10PX	0SR.A01A	Replace R Hip Jt, Acetab w Metal, Uncement, Open
ICD10PX	0SR.A01Z	Replacement of R Hip Jt, Acetab with Metal, Open Approach
ICD10PX	0SR.A039	Replace R Hip Jt, Acetab w Ceramic, Cement, Open
ICD10PX	0SR.A03A	Replace R Hip Jt, Acetab w Ceramic, Uncement, Open
ICD10PX	0SR.A03Z	Replacement of R Hip Jt, Acetab with Ceramic, Open Approach
ICD10PX	0SR.A07Z	Replace of R Hip Jt, Acetab with Autol Sub, Open Approach
ICD10PX	0SR.A0J9	Replace R Hip Jt, Acetab w Synth Sub, Cement, Open
ICD10PX	0SR.A0JA	Replace R Hip Jt, Acetab w Synth Sub, Uncement, Open
ICD10PX	0SR.A0JZ	Replace of R Hip Jt, Acetab with Synth Sub, Open Approach
ICD10PX	0SR.A0KZ	Replace of R Hip Jt, Acetab with Nonaut Sub, Open Approach
ICD10PX	0SR.B019	Replacement of L Hip Jt with Metal, Cement, Open Approach
ICD10PX	0SR.B01A	Replacement of L Hip Jt with Metal, Uncement, Open Approach
ICD10PX	0SR.B01Z	Replacement of Left Hip Joint with Metal, Open Approach
ICD10PX	0SR.B029	Replace L Hip Jt w Metal on Poly, Cement, Open
ICD10PX	0SR.B02A	Replace L Hip Jt w Metal on Poly, Uncement, Open
ICD10PX	0SR.B02Z	Replacement of L Hip Jt with Metal on Poly, Open Approach
ICD10PX	0SR.B039	Replacement of L Hip Jt with Ceramic, Cement, Open Approach
ICD10PX	0SR.B03A	Replace of L Hip Jt with Ceramic, Uncement, Open Approach
ICD10PX	0SR.B03Z	Replacement of Left Hip Joint with Ceramic, Open Approach
ICD10PX	0SR.B049	Replace L Hip Jt w Ceramic on Poly, Cement, Open
ICD10PX	0SR.B04A	Replace L Hip Jt w Ceramic on Poly, Uncement, Open
ICD10PX	0SR.B04Z	Replacement of L Hip Jt with Ceramic on Poly, Open Approach
ICD10PX	0SR.B069	Replace of L Hip Jt with Zirc on Poly, Cement, Open Approach

ICD10PX	0SR.B06A	Replace L Hip Jt w Zirc on Poly, Uncement, Open
ICD10PX	0SR.B06Z	Replacement of L Hip Jt with Zirc on Poly, Open Approach
ICD10PX	0SR.B07Z	Replacement of Left Hip Joint with Autol Sub, Open Approach
ICD10PX	0SR.B0EZ	Replacement of Left Hip Joint with Artc Spcr, Open Approach
ICD10PX	0SR.B0J9	Replace of L Hip Jt with Synth Sub, Cement, Open Approach
ICD10PX	0SR.B0JA	Replace of L Hip Jt with Synth Sub, Uncement, Open Approach
ICD10PX	0SR.B0JZ	Replacement of Left Hip Joint with Synth Sub, Open Approach
ICD10PX	0SR.B0KZ	Replacement of Left Hip Joint with Nonaut Sub, Open Approach
ICD10PX	0SR.E009	Replace L Hip Jt, Acetab w Polyeth, Cement, Open
ICD10PX	0SR.E00A	Replace L Hip Jt, Acetab w Polyeth, Uncement, Open
ICD10PX	0SR.E00Z	Replacement of L Hip Jt, Acetab with Polyeth, Open Approach
ICD10PX	0SR.E019	Replace L Hip Jt, Acetab w Metal, Cement, Open
ICD10PX	0SR.E01A	Replace L Hip Jt, Acetab w Metal, Uncement, Open
ICD10PX	0SR.E01Z	Replacement of L Hip Jt, Acetab with Metal, Open Approach
ICD10PX	0SR.E039	Replace L Hip Jt, Acetab w Ceramic, Cement, Open
ICD10PX	0SR.E03A	Replace L Hip Jt, Acetab w Ceramic, Uncement, Open
ICD10PX	0SR.E03Z	Replacement of L Hip Jt, Acetab with Ceramic, Open Approach
ICD10PX	0SR.E07Z	Replace of L Hip Jt, Acetab with Autol Sub, Open Approach
ICD10PX	0SR.E0J9	Replace L Hip Jt, Acetab w Synth Sub, Cement, Open
ICD10PX	0SR.E0JA	Replace L Hip Jt, Acetab w Synth Sub, Uncement, Open
ICD10PX	0SR.E0JZ	Replace of L Hip Jt, Acetab with Synth Sub, Open Approach
ICD10PX	0SR.E0KZ	Replace of L Hip Jt, Acetab with Nonaut Sub, Open Approach
ICD10PX	0SR.R019	Replace R Hip Jt, Femoral w Metal, Cement, Open
ICD10PX	0SR.R01A	Replace R Hip Jt, Femoral w Metal, Uncement, Open
ICD10PX	0SR.R01Z	Replacement of R Hip Jt, Femoral with Metal, Open Approach
ICD10PX	0SR.R039	Replace R Hip Jt, Femoral w Ceramic, Cement, Open
ICD10PX	0SR.R03A	Replace R Hip Jt, Femoral w Ceramic, Uncement, Open
ICD10PX	0SR.R03Z	Replacement of R Hip Jt, Femoral with Ceramic, Open Approach
ICD10PX	0SR.R07Z	Replace of R Hip Jt, Femoral with Autol Sub, Open Approach
ICD10PX	0SR.R0J9	Replace R Hip Jt, Femoral w Synth Sub, Cement, Open
ICD10PX	0SR.R0JA	Replace R Hip Jt, Femoral w Synth Sub, Uncement, Open
ICD10PX	0SR.R0JZ	Replace of R Hip Jt, Femoral with Synth Sub, Open Approach
ICD10PX	0SR.R0KZ	Replace of R Hip Jt, Femoral with Nonaut Sub, Open Approach
ICD10PX	0SR.S019	Replace L Hip Jt, Femoral w Metal, Cement, Open
ICD10PX	0SR.S01A	Replace L Hip Jt, Femoral w Metal, Uncement, Open
ICD10PX	0SR.S01Z	Replacement of L Hip Jt, Femoral with Metal, Open Approach
ICD10PX	0SR.S039	Replace L Hip Jt, Femoral w Ceramic, Cement, Open
ICD10PX	0SR.S03A	Replace L Hip Jt, Femoral w Ceramic, Uncement, Open
ICD10PX	0SR.S03Z	Replacement of L Hip Jt, Femoral with Ceramic, Open Approach
ICD10PX	0SR.S07Z	Replace of L Hip Jt, Femoral with Autol Sub, Open Approach
ICD10PX	0SR.S0J9	Replace L Hip Jt, Femoral w Synth Sub, Cement, Open
ICD10PX	0SR.S0JA	Replace L Hip Jt, Femoral w Synth Sub, Uncement, Open
ICD10PX	0SR.S0JZ	Replace of L Hip Jt, Femoral with Synth Sub, Open Approach
ICD10PX	0SR.S0KZ	Replace of L Hip Jt, Femoral with Nonaut Sub, Open Approach
ICD10PX	0SR.C069	Replace R Knee Jt w Zirc on Poly, Cement, Open

ICD10PX	0SR.C06A	Replace R Knee Jt w Zirc on Poly, Uncement, Open
ICD10PX	0SR.C06Z	Replacement of R Knee Jt with Zirc on Poly, Open Approach
ICD10PX	0SR.C07Z	Replacement of R Knee Jt with Autol Sub, Open Approach
ICD10PX	0SR.C0EZ	Replacement of R Knee Jt with Artc Spcr, Open Approach
ICD10PX	0SR.C0J9	Replace of R Knee Jt with Synth Sub, Cement, Open Approach
ICD10PX	0SR.C0JA	Replace of R Knee Jt with Synth Sub, Uncement, Open Approach
ICD10PX	0SR.C0JZ	Replacement of R Knee Jt with Synth Sub, Open Approach
ICD10PX	0SR.C0KZ	Replacement of R Knee Jt with Nonaut Sub, Open Approach
ICD10PX	0SR.C0L9	Replace of R Knee Jt with Med Unicnd, Cement, Open Approach
ICD10PX	0SR.C0LA	Replace R Knee Jt w Med Unicnd, Uncement, Open
ICD10PX	0SR.C0LZ	Replacement of R Knee Jt with Med Unicnd, Open Approach
ICD10PX	0SR.C0M9	Replace of R Knee Jt with Lat Unicnd, Cement, Open Approach
ICD10PX	0SR.C0MA	Replace R Knee Jt w Lat Unicnd, Uncement, Open
ICD10PX	0SR.C0MZ	Replacement of R Knee Jt with Lat Unicnd, Open Approach
ICD10PX	0SR.C0N9	Replace of R Knee Jt with Patelfem, Cement, Open Approach
ICD10PX	0SR.C0NA	Replace of R Knee Jt with Patelfem, Uncement, Open Approach
ICD10PX	0SR.C0NZ	Replacement of Right Knee Joint with Patelfem, Open Approach
ICD10PX	0SR.D069	Replace L Knee Jt w Zirc on Poly, Cement, Open
ICD10PX	0SR.D06A	Replace L Knee Jt w Zirc on Poly, Uncement, Open
ICD10PX	0SR.D06Z	Replacement of L Knee Jt with Zirc on Poly, Open Approach
ICD10PX	0SR.D07Z	Replacement of Left Knee Joint with Autol Sub, Open Approach
ICD10PX	0SR.D0EZ	Replacement of Left Knee Joint with Artc Spcr, Open Approach
ICD10PX	0SR.D0J9	Replace of L Knee Jt with Synth Sub, Cement, Open Approach
ICD10PX	0SR.D0JA	Replace of L Knee Jt with Synth Sub, Uncement, Open Approach
ICD10PX	0SR.D0JZ	Replacement of Left Knee Joint with Synth Sub, Open Approach
ICD10PX	0SR.D0KZ	Replacement of L Knee Jt with Nonaut Sub, Open Approach
ICD10PX	0SR.D0L9	Replace of L Knee Jt with Med Unicnd, Cement, Open Approach
ICD10PX	0SR.D0LA	Replace L Knee Jt w Med Unicnd, Uncement, Open
ICD10PX	0SR.D0LZ	Replacement of L Knee Jt with Med Unicnd, Open Approach
ICD10PX	0SR.D0M9	Replace of L Knee Jt with Lat Unicnd, Cement, Open Approach
ICD10PX	0SR.D0MA	Replace L Knee Jt w Lat Unicnd, Uncement, Open
ICD10PX	0SR.D0MZ	Replacement of L Knee Jt with Lat Unicnd, Open Approach
ICD10PX	0SR.D0N9	Replace of L Knee Jt with Patelfem, Cement, Open Approach
ICD10PX	0SR.D0NA	Replace of L Knee Jt with Patelfem, Uncement, Open Approach
ICD10PX	0SR.D0NZ	Replacement of Left Knee Joint with Patelfem, Open Approach
ICD10PX	0SR.T07Z	Replace of R Knee Jt, Femoral with Autol Sub, Open Approach
ICD10PX	0SR.T0J9	Replace R Knee Jt, Femoral w Synth Sub, Cement, Open
ICD10PX	0SR.T0JA	Replace R Knee Jt, Femoral w Synth Sub, Uncement, Open
ICD10PX	0SR.T0JZ	Replace of R Knee Jt, Femoral with Synth Sub, Open Approach
ICD10PX	0SR.T0KZ	Replace of R Knee Jt, Femoral with Nonaut Sub, Open Approach
ICD10PX	0SR.U07Z	Replace of L Knee Jt, Femoral with Autol Sub, Open Approach
ICD10PX	0SR.U0J9	Replace L Knee Jt, Femoral w Synth Sub, Cement, Open
ICD10PX	0SR.U0JA	Replace L Knee Jt, Femoral w Synth Sub, Uncement, Open
ICD10PX	0SR.U0JZ	Replace of L Knee Jt, Femoral with Synth Sub, Open Approach
ICD10PX	0SR.U0KZ	Replace of L Knee Jt, Femoral with Nonaut Sub, Open Approach

ICD10PX	0SR.V07Z	Replace of R Knee Jt, Tibial with Autol Sub, Open Approach
ICD10PX	0SR.V0J9	Replace R Knee Jt, Tibial w Synth Sub, Cement, Open
ICD10PX	0SR.V0JA	Replace R Knee Jt, Tibial w Synth Sub, Uncement, Open
ICD10PX	0SR.V0JZ	Replace of R Knee Jt, Tibial with Synth Sub, Open Approach
ICD10PX	0SR.V0KZ	Replace of R Knee Jt, Tibial with Nonaut Sub, Open Approach
ICD10PX	0SR.W07Z	Replace of L Knee Jt, Tibial with Autol Sub, Open Approach
ICD10PX	0SR.W0J9	Replace L Knee Jt, Tibial w Synth Sub, Cement, Open
ICD10PX	0SR.W0JA	Replace L Knee Jt, Tibial w Synth Sub, Uncement, Open
ICD10PX	0SR.W0JZ	Replace of L Knee Jt, Tibial with Synth Sub, Open Approach
ICD10PX	0SR.W0KZ	Replace of L Knee Jt, Tibial with Nonaut Sub, Open Approach

## Falls

SOURCE	CODE	DESCRIPTION
ICD9DX	E880	fall on stairs or steps*
ICD9DX	E880.0	fall on escalator
ICD9DX	E880.1	fall on sidewalk curb
ICD9DX	E880.9	fall on stair/step nec
ICD9DX	E884.2	fall from chair
ICD9DX	E884.3	fall from wheelchair
ICD9DX	E884.4	fall from bed
ICD9DX	E884.5	fall from furniture nec
ICD9DX	E884.6	fall from commode
ICD9DX	E885.9	fall from slipping nec
ICD9DX	E888	fall nec & nos*
ICD9DX	E888.0	fall striking sharp obj
ICD9DX	E888.1	fall striking object nec
ICD9DX	E888.8	fall nec
ICD9DX	E888.9	fall nos
ICD9DX	V15.88	personal history of fall
ICD10DX	W00	Fall due to ice and snow
ICD10DX	W00.0	Fall on same level due to ice and snow
ICD10DX	W00.0XXA	Fall on same level due to ice and snow, initial encounter
ICD10DX	W00.0XXD	Fall on same level due to ice and snow, subsequent encounter
ICD10DX	W00.0XXS	Fall on same level due to ice and snow, sequela
ICD10DX	W00.1	Fall from stairs and steps due to ice and snow
ICD10DX	W00.1XXA	Fall from stairs and steps due to ice and snow, init encntr
ICD10DX	W00.1XXD	Fall from stairs and steps due to ice and snow, subs encntr
ICD10DX	W00.1XXS	Fall from stairs and steps due to ice and snow, sequela
ICD10DX	W00.2	Other fall from one level to another due to ice and snow
ICD10DX	W00.2XXA	Oth fall from one level to another due to ice and snow, init
ICD10DX	W00.2XXD	Oth fall from one level to another due to ice and snow, subs
ICD10DX	W00.2XXS	Oth fall from one level to another due to ice and snow, sqla
ICD10DX	W00.9	Unspecified fall due to ice and snow
ICD10DX	W00.9XXA	Unspecified fall due to ice and snow, initial encounter

ICD10DX	W00.9XXD	Unspecified fall due to ice and snow, subsequent encounter
ICD10DX	W00.9XXS	Unspecified fall due to ice and snow, sequela
ICD10DX	W01	Fall on same level from slipping, tripping and stumbling
ICD10DX	W01.0	Fall on same level from slip/trip w/o strike against object
ICD10DX	W01.0XXA	Fall same lev from slip/trip w/o strike against object, init
ICD10DX	W01.0XXD	Fall same lev from slip/trip w/o strike against object, subs
ICD10DX	W01.0XXS	Fall same lev from slip/trip w/o strike agnst object, sqla
ICD10DX	W01.1	Fall on same level from slip/trip w strike against object
ICD10DX	W01.10	Fall same lev from slip/trip w strike against unsp object
ICD10DX	W01.10XA	Fall same lev from slip/trip w strike agnst unsp obj, init
ICD10DX	W01.10XD	Fall same lev from slip/trip w strike agnst unsp obj, subs
ICD10DX	W01.10XS	Fall same lev from slip/trip w strike agnst unsp obj, sqla
ICD10DX	W01.11	Fall same lev from slip/trip w strike against sharp object
ICD10DX	W01.110	Fall same lev from slip/trip w strike against sharp glass
ICD10DX	W01.110A	Fall same lev from slip/trip w strk agnst sharp glass, init
ICD10DX	W01.110D	Fall same lev from slip/trip w strk agnst sharp glass, subs
ICD10DX	W01.110S	Fall same lev from slip/trip w strk agnst sharp glass, sqla
ICD10DX	W01.111	Fall same lev from slip/trip w strike against pwr tl/machn
ICD10DX	W01.111A	Fall same lev from slip/trip w strk agnst pwr tl/machn, init
ICD10DX	W01.111D	Fall same lev from slip/trip w strk agnst pwr tl/machn, subs
ICD10DX	W01.111S	Fall same lev from slip/trip w strk agnst pwr tl/machn, sqla
ICD10DX	W01.118	Fall same lev from slip/trip w strike agnst oth sharp object
ICD10DX	W01.118A	Fall same lev fr slip/trip w strk agnst oth sharp obj, init
ICD10DX	W01.118D	Fall same lev fr slip/trip w strk agnst oth sharp obj, subs
ICD10DX	W01.118S	Fall same lev fr slip/trip w strk agnst oth sharp obj, sqla
ICD10DX	W01.119	Fall same lev from slip/trip w strike agnst unsp sharp obj
ICD10DX	W01.119A	Fall same lev fr slip/trip w strk agnst unsp sharp obj, init
ICD10DX	W01.119D	Fall same lev fr slip/trip w strk agnst unsp sharp obj, subs
ICD10DX	W01.119S	Fall same lev fr slip/trip w strk agnst unsp sharp obj, sqla
ICD10DX	W01.19	Fall same lev from slip/trip w strike against oth object
ICD10DX	W01.190	Fall on same level from slip/trip w strike against furniture
ICD10DX	W01.190A	Fall same lev from slip/trip w strike agnst furniture, init
ICD10DX	W01.190D	Fall same lev from slip/trip w strike agnst furniture, subs
ICD10DX	W01.190S	Fall same lev from slip/trip w strike agnst furniture, sqla
ICD10DX	W01.198	Fall same lev from slip/trip w strike against oth object
ICD10DX	W01.198A	Fall same lev from slip/trip w strike agnst oth object, init
ICD10DX	W01.198D	Fall same lev from slip/trip w strike agnst oth object, subs
ICD10DX	W01.198S	Fall same lev from slip/trip w strike agnst oth object, sqla
ICD10DX	W05	Fall from wheelchr/nonmotor scoot
ICD10DX	W05.0	Fall from non-moving wheelchair
ICD10DX	W05.0XXA	Fall from non-moving wheelchair, initial encounter
ICD10DX	W05.0XXD	Fall from non-moving wheelchair, subsequent encounter
ICD10DX	W05.0XXS	Fall from non-moving wheelchair, sequela
ICD10DX	W05.1	Fall from non-moving nonmotorized scooter
ICD10DX	W05.1XXA	Fall from non-moving nonmotorized scooter, initial encounter

ICD10DX	W05.1XXD Fall from non-moving nonmotorized scooter, subs encntr
ICD10DX	W05.1XXS Fall from non-moving nonmotorized scooter, sequela
ICD10DX	W05.2 Fall from non-moving motorized mobility scooter
ICD10DX	W05.2XXA Fall from non-moving motorized mobility scooter, init encntr
ICD10DX	W05.2XXD Fall from non-moving motorized mobility scooter, subs encntr
ICD10DX	W05.2XXS Fall from non-moving motorized mobility scooter, sequela
ICD10DX	W06 Fall from bed
ICD10DX	W06.XXXA Fall from bed, initial encounter
ICD10DX	W06.XXXXD Fall from bed, subsequent encounter
ICD10DX	W06.XXXS Fall from bed, sequela
ICD10DX	W07 Fall from chair
ICD10DX	W07.XXXA Fall from chair, initial encounter
ICD10DX	W07.XXXXD Fall from chair, subsequent encounter
ICD10DX	W07.XXXS Fall from chair, sequela
ICD10DX	W08 Fall from other furniture
ICD10DX	W08.XXXA Fall from other furniture, initial encounter
ICD10DX	W08.XXXXD Fall from other furniture, subsequent encounter
ICD10DX	W08.XXXS Fall from other furniture, sequela
ICD10DX	W10 Fall on and from stairs and steps
ICD10DX	W10.0 Fall (on)(from) escalator
ICD10DX	W10.0XXA Fall (on)(from) escalator, initial encounter
ICD10DX	W10.0XXD Fall (on)(from) escalator, subsequent encounter
ICD10DX	W10.0XXS Fall (on)(from) escalator, sequela
ICD10DX	W10.1 Fall (on)(from) sidewalk curb
ICD10DX	W10.1XXA Fall (on)(from) sidewalk curb, initial encounter
ICD10DX	W10.1XXD Fall (on)(from) sidewalk curb, subsequent encounter
ICD10DX	W10.1XXS Fall (on)(from) sidewalk curb, sequela
ICD10DX	W10.2 Fall (on)(from) incline
ICD10DX	W10.2XXA Fall (on)(from) incline, initial encounter
ICD10DX	W10.2XXD Fall (on)(from) incline, subsequent encounter
ICD10DX	W10.2XXS Fall (on)(from) incline, sequela
ICD10DX	W10.8 Fall (on) (from) other stairs and steps
ICD10DX	W10.8XXA Fall (on) (from) other stairs and steps, initial encounter
ICD10DX	W10.8XXD Fall (on) (from) other stairs and steps, subs encntr
ICD10DX	W10.8XXS Fall (on) (from) other stairs and steps, sequela
ICD10DX	W10.9 Fall (on) (from) unspecified stairs and steps
ICD10DX	W10.9XXA Fall (on) (from) unspecified stairs and steps, init encntr
ICD10DX	W10.9XXD Fall (on) (from) unspecified stairs and steps, subs encntr
ICD10DX	W10.9XXS Fall (on) (from) unspecified stairs and steps, sequela
ICD10DX	W18.1 Fall from or off toilet
ICD10DX	W18.11 Fall from or off toilet w/o strike against object
ICD10DX	W18.11XA Fall from or off toilet w/o strike against object, init
ICD10DX	W18.11XD Fall from or off toilet w/o strike against object, subs
ICD10DX	W18.11XS Fall from or off toilet w/o strike against object, sequela
ICD10DX	W18.12 Fall from or off toilet w subsequent striking against object

ICD10DX	W18.12XA	Fall from or off toilet w strike against object, init
ICD10DX	W18.12XD	Fall from or off toilet w strike against object, subs
ICD10DX	W18.12XS	Fall from or off toilet w strike against object, sequela
ICD10DX	W18.2	Fall in (into) shower or empty bathtub
ICD10DX	W18.2XXA	Fall in (into) shower or empty bathtub, initial encounter
ICD10DX	W18.2XXD	Fall in (into) shower or empty bathtub, subsequent encounter
ICD10DX	W18.2XXS	Fall in (into) shower or empty bathtub, sequela
ICD10DX	W18.3	Other and unspecified fall on same level
ICD10DX	W18.30	Fall on same level, unspecified
ICD10DX	W18.30XA	Fall on same level, unspecified, initial encounter
ICD10DX	W18.30XD	Fall on same level, unspecified, subsequent encounter
ICD10DX	W18.30XS	Fall on same level, unspecified, sequela
ICD10DX	W18.31	Fall on same level due to stepping on an object
ICD10DX	W18.31XA	Fall on same level due to stepping on an object, init encntr
ICD10DX	W18.31XD	Fall on same level due to stepping on an object, subs encntr
ICD10DX	W18.31XS	Fall on same level due to stepping on an object, sequela
ICD10DX	W18.39	Other fall on same level
ICD10DX	W18.39XA	Other fall on same level, initial encounter
ICD10DX	W18.39XD	Other fall on same level, subsequent encounter
ICD10DX	W18.39XS	Other fall on same level, sequela
ICD10DX	W19	Unspecified fall
ICD10DX	W19.XXXXA	Unspecified fall, initial encounter
ICD10DX	W19.XXXXD	Unspecified fall, subsequent encounter
ICD10DX	W19.XXXS	Unspecified fall, sequela
ICD10DX	Z91.81	History of falling

## Ischemic Stroke

SOURCE	CODE	DESCRIPTION
ICD9DX	362.31	cent retina artery occlu
ICD9DX	362.32	arterial branch oclus
ICD9DX	362.33	part arterial occlusion
ICD9DX	362.34	transient arterial occlu
ICD9DX	433.01	ocl bslr art w infrc
ICD9DX	433.11	ocl crttd art w infrc
ICD9DX	433.21	ocl vrtb art w infrc
ICD9DX	433.31	ocl mlt bi art w infrc
ICD9DX	433.81	ocl spcf art w infrc
ICD9DX	433.91	ocl art nos w infrc
ICD9DX	434.01	crbl thrmbs w infrc
ICD9DX	434.11	crbl emblsm w infrc
ICD9DX	436	cva
ICD10DX	H34.0	Transient retinal artery occlusion
ICD10DX	H34.00	Transient retinal artery occlusion, unspecified eye
ICD10DX	H34.01	Transient retinal artery occlusion, right eye

ICD10DX	H34.02	Transient retinal artery occlusion, left eye
ICD10DX	H34.03	Transient retinal artery occlusion, bilateral
ICD10DX	H34.1	Central retinal artery occlusion
ICD10DX	H34.10	Central retinal artery occlusion, unspecified eye
ICD10DX	H34.11	Central retinal artery occlusion, right eye
ICD10DX	H34.12	Central retinal artery occlusion, left eye
ICD10DX	H34.13	Central retinal artery occlusion, bilateral
ICD10DX	H34.2	Other retinal artery occlusions
ICD10DX	H34.21	Partial retinal artery occlusion
ICD10DX	H34.211	Partial retinal artery occlusion, right eye
ICD10DX	H34.212	Partial retinal artery occlusion, left eye
ICD10DX	H34.213	Partial retinal artery occlusion, bilateral
ICD10DX	H34.219	Partial retinal artery occlusion, unspecified eye
ICD10DX	H34.23	Retinal artery branch occlusion
ICD10DX	H34.231	Retinal artery branch occlusion, right eye
ICD10DX	H34.232	Retinal artery branch occlusion, left eye
ICD10DX	H34.233	Retinal artery branch occlusion, bilateral
ICD10DX	H34.239	Retinal artery branch occlusion, unspecified eye
ICD10DX	I63	Cerebral infarction
ICD10DX	I63.0	Cerebral infarction due to thrombosis of precerb arteries
ICD10DX	I63.00	Cerebral infarction due to thombos unsp precerebral artery
ICD10DX	I63.01	Cerebral infarction due to thrombosis of vertebral artery
ICD10DX	I63.011	Cerebral infarction due to thrombosis of r verteb art
ICD10DX	I63.012	Cerebral infarction due to thrombosis of l verteb art
ICD10DX	I63.013	Cerebral infrc due to thrombosis of bilateral verteb art
ICD10DX	I63.019	Cerebral infarction due to thombos unsp vertebral artery
ICD10DX	I63.02	Cerebral infarction due to thrombosis of basilar artery
ICD10DX	I63.03	Cerebral infarction due to thrombosis of carotid artery
ICD10DX	I63.031	Cerebral infrc due to thrombosis of right carotid artery
ICD10DX	I63.032	Cerebral infarction due to thrombosis of left carotid artery
ICD10DX	I63.033	Cerebral infrc due to thombos of bilateral carotid arteries
ICD10DX	I63.039	Cerebral infarction due to thrombosis of unsp carotid artery
ICD10DX	I63.09	Cerebral infarction due to thrombosis of precerebral artery
ICD10DX	I63.1	Cerebral infarction due to embolism of precerebral arteries
ICD10DX	I63.10	Cerebral infarction due to embolism of unsp precrb artery
ICD10DX	I63.11	Cerebral infarction due to embolism of vertebral artery
ICD10DX	I63.111	Cerebral infarction due to embolism of r verteb art
ICD10DX	I63.112	Cerebral infarction due to embolism of left vertebral artery
ICD10DX	I63.113	Cerebral infarction due to embolism of bilateral verteb art
ICD10DX	I63.119	Cerebral infarction due to embolism of unsp vertebral artery
ICD10DX	I63.12	Cerebral infarction due to embolism of basilar artery
ICD10DX	I63.13	Cerebral infarction due to embolism of carotid artery
ICD10DX	I63.131	Cerebral infarction due to embolism of right carotid artery
ICD10DX	I63.132	Cerebral infarction due to embolism of left carotid artery
ICD10DX	I63.133	Cerebral infrc due to embolism of bilateral carotid arteries

ICD10DX	I63.139	Cerebral infarction due to embolism of unsp carotid artery
ICD10DX	I63.19	Cerebral infarction due to embolism of precerebral artery
ICD10DX	I63.2	Cerebral infrc due to unsp occls or stenosis of precerb art
ICD10DX	I63.20	Cereb infrc due to unsp occls or stenos of unsp precerb art
ICD10DX	I63.21	Cerebral infrc due to unsp occls or stenosis of verteb art
ICD10DX	I63.211	Cerebral infrc due to unsp occls or stenosis of r verteb art
ICD10DX	I63.212	Cerebral infrc due to unsp occls or stenosis of l verteb art
ICD10DX	I63.213	Cereb infrc due to unsp occls or stenosis of bi verteb art
ICD10DX	I63.219	Cereb infrc due to unsp occls or stenosis of unsp verteb art
ICD10DX	I63.22	Cereb infrc due to unsp occls or stenosis of basilar artery
ICD10DX	I63.23	Cerebral infrc due to unsp occls or stenosis of carotid art
ICD10DX	I63.231	Cereb infrc due to unsp occls or stenos of right carotid art
ICD10DX	I63.232	Cereb infrc due to unsp occls or stenos of left carotid art
ICD10DX	I63.233	Cereb infrc due to unsp occls or stenosis of bi carotid art
ICD10DX	I63.239	Cereb infrc due to unsp occls or stenos of unsp crtd artery
ICD10DX	I63.29	Cerebral infrc due to unsp occls or stenosis of precerb art
ICD10DX	I63.3	Cerebral infarction due to thrombosis of cerebral arteries
ICD10DX	I63.30	Cerebral infarction due to thombos unsp cerebral artery
ICD10DX	I63.31	Cerebral infrc due to thrombosis of middle cerebral artery
ICD10DX	I63.311	Cereb infrc due to thombos of right middle cerebral artery
ICD10DX	I63.312	Cerebral infrc due to thombos of left middle cerebral artery
ICD10DX	I63.313	Cerebral infrc due to thombos of bi middle cerebral arteries
ICD10DX	I63.319	Cerebral infrc due to thombos unsp middle cerebral artery
ICD10DX	I63.32	Cerebral infrc due to thrombosis of anterior cerebral artery
ICD10DX	I63.321	Cerebral infrc due to thombos of right ant cerebral artery
ICD10DX	I63.322	Cerebral infrc due to thombos of left ant cerebral artery
ICD10DX	I63.323	Cerebral infrc due to thombos of bi ant cerebral arteries
ICD10DX	I63.329	Cerebral infrc due to thombos unsp anterior cerebral artery
ICD10DX	I63.33	Cerebral infrc due to thombos of posterior cerebral artery
ICD10DX	I63.331	Cerebral infrc due to thombos of right post cerebral artery
ICD10DX	I63.332	Cerebral infrc due to thombos of left post cerebral artery
ICD10DX	I63.333	Cerebral infrc due to thombos of bi post cerebral arteries
ICD10DX	I63.339	Cerebral infrc due to thombos unsp posterior cerebral artery
ICD10DX	I63.34	Cerebral infarction due to thrombosis of cerebellar artery
ICD10DX	I63.341	Cerebral infrc due to thrombosis of right cereblr artery
ICD10DX	I63.342	Cerebral infarction due to thrombosis of left cereblr artery
ICD10DX	I63.343	Cerebral infrc due to thombos of bilateral cereblr arteries
ICD10DX	I63.349	Cerebral infarction due to thombos unsp cerebellar artery
ICD10DX	I63.39	Cerebral infarction due to thrombosis of oth cerebral artery
ICD10DX	I63.4	Cerebral infarction due to embolism of cerebral arteries
ICD10DX	I63.40	Cerebral infarction due to embolism of unsp cerebral artery
ICD10DX	I63.41	Cerebral infrc due to embolism of middle cerebral artery
ICD10DX	I63.411	Cereb infrc due to embolism of right middle cerebral artery
ICD10DX	I63.412	Cereb infrc due to embolism of left middle cerebral artery
ICD10DX	I63.413	Cerebral infrc due to embolism of bi middle cerebral art

ICD10DX	I63.419	Cereb infrc due to embolism of unsp middle cerebral artery
ICD10DX	I63.42	Cerebral infrc due to embolism of anterior cerebral artery
ICD10DX	I63.421	Cerebral infrc due to embolism of right ant cerebral artery
ICD10DX	I63.422	Cerebral infrc due to embolism of left ant cerebral artery
ICD10DX	I63.423	Cerebral infrc due to embolism of bi ant cerebral arteries
ICD10DX	I63.429	Cerebral infrc due to embolism of unsp ant cerebral artery
ICD10DX	I63.43	Cerebral infrc due to embolism of posterior cerebral artery
ICD10DX	I63.431	Cerebral infrc due to embolism of right post cerebral artery
ICD10DX	I63.432	Cerebral infrc due to embolism of left post cerebral artery
ICD10DX	I63.433	Cerebral infrc due to embolism of bi post cerebral arteries
ICD10DX	I63.439	Cerebral infrc due to embolism of unsp post cerebral artery
ICD10DX	I63.44	Cerebral infarction due to embolism of cerebellar artery
ICD10DX	I63.441	Cerebral infarction due to embolism of right cereb儿 artery
ICD10DX	I63.442	Cerebral infarction due to embolism of left cereb儿 artery
ICD10DX	I63.443	Cerebral infrc due to embolism of bilateral cereb儿 arteries
ICD10DX	I63.449	Cerebral infarction due to embolism of unsp cereb儿 artery
ICD10DX	I63.49	Cerebral infarction due to embolism of other cerebral artery
ICD10DX	I63.5	Cerebral infrc due to unsp occls or stenosis of cerebral art
ICD10DX	I63.50	Cereb infrc due to unsp occls or stenos of unsp cereb artery
ICD10DX	I63.51	Cereb infrc due to unsp occls or stenos of middle cereb art
ICD10DX	I63.511	Cereb infrc d/t unsp occls or stenos of right mid cereb art
ICD10DX	I63.512	Cereb infrc d/t unsp occls or stenos of left mid cereb art
ICD10DX	I63.513	Cereb infrc d/t unsp occls or stenos of bi middle cereb art
ICD10DX	I63.519	Cereb infrc d/t unsp occls or stenos of unsp mid cereb art
ICD10DX	I63.52	Cereb infrc due to unsp occls or stenos of ant cereb artery
ICD10DX	I63.521	Cereb infrc d/t unsp occls or stenos of right ant cereb art
ICD10DX	I63.522	Cereb infrc d/t unsp occls or stenos of left ant cereb art
ICD10DX	I63.523	Cereb infrc due to unsp occls or stenos of bi ant cereb art
ICD10DX	I63.529	Cereb infrc d/t unsp occls or stenos of unsp ant cereb art
ICD10DX	I63.53	Cereb infrc due to unsp occls or stenos of post cereb artery
ICD10DX	I63.531	Cereb infrc d/t unsp occls or stenos of right post cereb art
ICD10DX	I63.532	Cereb infrc d/t unsp occls or stenos of left post cereb art
ICD10DX	I63.533	Cereb infrc due to unsp occls or stenos of bi post cereb art
ICD10DX	I63.539	Cereb infrc d/t unsp occls or stenos of unsp post cereb art
ICD10DX	I63.54	Cereb infrc due to unsp occls or stenosis of cereb儿 artery
ICD10DX	I63.541	Cereb infrc due to unsp occls or stenos of right cereb儿 art
ICD10DX	I63.542	Cereb infrc due to unsp occls or stenos of left cereb儿 art
ICD10DX	I63.543	Cereb infrc due to unsp occls or stenosis of bi cereb儿 art
ICD10DX	I63.549	Cereb infrc due to unsp occls or stenos of unsp cereb儿 art
ICD10DX	I63.59	Cereb infrc due to unsp occls or stenosis of cerebral artery
ICD10DX	I63.6	Cerebral infrc due to cerebral venous thrombos, nonpyogenic
ICD10DX	I63.8	Other cerebral infarction
ICD10DX	I63.81	Other cereb infrc due to occls or stenosis of small artery
ICD10DX	I63.89	Other cerebral infarction
ICD10DX	I63.9	Cerebral infarction, unspecified

## Systemic Embolism

SOURCE	CODE	DESCRIPTION
ICD9DX	444	arterial embolism*
ICD9DX	444.0	abd aortic embolism#
ICD9DX	444.01	saddle embolus abd aorta
ICD9DX	444.09	ot art emb/thrm abd aort
ICD9DX	444.1	thoracic aortic embolism
ICD9DX	444.2	embolism of extremity*
ICD9DX	444.21	upper extremity embolism
ICD9DX	444.22	lower extremity embolism
ICD9DX	444.8	arterial embolism nec*
ICD9DX	444.81	iliac artery embolism
ICD9DX	444.89	arterial embolism nec
ICD9DX	444.9	arterial embolism nos
ICD9DX	445	*
ICD9DX	445.0	*
ICD9DX	445.01	atheroembolism,upper ext
ICD9DX	445.02	atheroembolism,lower ext
ICD9DX	445.8	*
ICD9DX	445.81	atheroembolism, kidney
ICD9DX	445.89	atheroembolism, site nec
ICD9DX	449	septic arterial embolism
ICD10DX	I74	Arterial embolism and thrombosis
ICD10DX	I74.0	Embolism and thrombosis of abdominal aorta
ICD10DX	I74.01	Saddle embolus of abdominal aorta
ICD10DX	I74.09	Other arterial embolism and thrombosis of abdominal aorta
ICD10DX	I74.1	Embolism and thrombosis of other and unsp parts of aorta
ICD10DX	I74.10	Embolism and thrombosis of unspecified parts of aorta
ICD10DX	I74.11	Embolism and thrombosis of thoracic aorta
ICD10DX	I74.19	Embolism and thrombosis of other parts of aorta
ICD10DX	I74.2	Embolism and thrombosis of arteries of the upper extremities
ICD10DX	I74.3	Embolism and thrombosis of arteries of the lower extremities
ICD10DX	I74.4	Embolism and thrombosis of arteries of extremities, unsp
ICD10DX	I74.5	Embolism and thrombosis of iliac artery
ICD10DX	I74.8	Embolism and thrombosis of other arteries
ICD10DX	I74.9	Embolism and thrombosis of unspecified artery
ICD10DX	I75	Atheroembolism
ICD10DX	I75.0	Atheroembolism of extremities
ICD10DX	I75.01	Atheroembolism of upper extremity
ICD10DX	I75.011	Atheroembolism of right upper extremity
ICD10DX	I75.012	Atheroembolism of left upper extremity
ICD10DX	I75.013	Atheroembolism of bilateral upper extremities
ICD10DX	I75.019	Atheroembolism of unspecified upper extremity

ICD10DX	I75.02	Atheroembolism of lower extremity
ICD10DX	I75.021	Atheroembolism of right lower extremity
ICD10DX	I75.022	Atheroembolism of left lower extremity
ICD10DX	I75.023	Atheroembolism of bilateral lower extremities
ICD10DX	I75.029	Atheroembolism of unspecified lower extremity
ICD10DX	I75.8	Atheroembolism of other sites
ICD10DX	I75.81	Atheroembolism of kidney
ICD10DX	I75.89	Atheroembolism of other site
ICD10DX	I76	Septic arterial embolism

## Critical Site Bleeding

SOURCE	CODE	DESCRIPTION
ICD9DX	336.1	vascular myelopathies
ICD9DX	363.61	choroidal hemorrhage nos
ICD9DX	363.62	expulsive choroid hemorrh
ICD9DX	363.72	hemorrh choroid detachmnt
ICD9DX	376.32	orbital hemorrhage
ICD9DX	377.42	optic nerve sheath hemorrh
ICD9DX	379.23	vitreous hemorrhage
ICD9DX	423.0	hemopericardium
ICD9DX	430	subarachnoid hemorrhage
ICD9DX	431	intracerebral hemorrhage
ICD9DX	432	intracranial hem nec/nos*
ICD9DX	432.0	nontraum extradural hem
ICD9DX	432.1	subdural hemorrhage
ICD9DX	432.9	intracranial hemorrh nos
ICD9DX	568.81	hemoperitoneum
ICD9DX	719.1	hemarthrosis*
ICD9DX	719.10	hemarthrosis-unspec
ICD9DX	719.11	hemarthrosis-shldr
ICD9DX	719.12	hemarthrosis-up/arm
ICD9DX	719.13	hemarthrosis-forearm
ICD9DX	719.14	hemarthrosis-hand
ICD9DX	719.15	hemarthrosis-pelvis
ICD9DX	719.16	hemarthrosis-l/leg
ICD9DX	719.17	hemarthrosis-ankle
ICD9DX	719.18	hemarthrosis-jt nec
ICD9DX	719.19	hemarthrosis-mult jts
ICD9DX	729.92	nontrauma hema soft tiss
ICD9DX	852	meningeal hem follow inj*
ICD9DX	852.0	traum subarachnoid hem*
ICD9DX	852.00	traum subarachnoid hem
ICD9DX	852.01	subarachnoid hem-no coma
ICD9DX	852.02	subarach hem-brief coma

ICD9DX	852.03	subarach hem-mod coma
ICD9DX	852.04	subarach hem-prolg coma
ICD9DX	852.05	subarach hem-deep coma
ICD9DX	852.06	subarach hem-coma nos
ICD9DX	852.09	subarach hem-concussion
ICD9DX	852.1	subarach hem w opn wound*
ICD9DX	852.10	subarach hem w opn wound
ICD9DX	852.11	opn subarach hem-no coma
ICD9DX	852.12	op subarach hem-brf coma
ICD9DX	852.13	op subarach hem-mod coma
ICD9DX	852.14	op subarach hem-prol com
ICD9DX	852.15	op subarach hem-deep com
ICD9DX	852.16	op subarach hem-coma nos
ICD9DX	852.19	opn subarach hem-concuss
ICD9DX	852.2	traumatic subdural hem*
ICD9DX	852.20	traumatic subdural hem
ICD9DX	852.21	subdural hem w/o coma
ICD9DX	852.22	subdural hem-brief coma
ICD9DX	852.23	subdural hemorrh-mod coma
ICD9DX	852.24	subdural hem-prolging coma
ICD9DX	852.25	subdural hem-deep coma
ICD9DX	852.26	subdural hemorrh-coma nos
ICD9DX	852.29	subdural hem-concussion
ICD9DX	852.3	subdural hem w opn wound*
ICD9DX	852.30	subdural hem w opn wound
ICD9DX	852.31	open subdur hem w/o coma
ICD9DX	852.32	opn subdur hem-brf coma
ICD9DX	852.33	opn subdur hem-mod coma
ICD9DX	852.34	opn subdur hem-prol coma
ICD9DX	852.35	opn subdur hem-deep coma
ICD9DX	852.36	opn subdur hem-coma nos
ICD9DX	852.39	opn subdur hem-concuss
ICD9DX	852.4	traumatic extradural hem*
ICD9DX	852.40	traumatic extradural hem
ICD9DX	852.41	extradural hem w/o coma
ICD9DX	852.42	extradur hem-brief coma
ICD9DX	852.43	extradural hem-mod coma
ICD9DX	852.44	extradur hem-proln coma
ICD9DX	852.45	extradural hem-deep coma
ICD9DX	852.46	extradural hem-coma nos
ICD9DX	852.49	extadural hem-concuss
ICD9DX	852.5	extradural hem w opn wnd*
ICD9DX	852.50	extradural hem w opn wnd
ICD9DX	852.51	extradural hemor-no coma
ICD9DX	852.52	extradur hem-brief coma

ICD9DX	852.53	extradural hem-mod coma
ICD9DX	852.54	extradur hem-proln coma
ICD9DX	852.55	extradur hem-deep coma
ICD9DX	852.56	extradural hem-coma nos
ICD9DX	852.59	extradural hem-concuss
ICD9DX	853	oth traumatic brain hem*
ICD9DX	853.0	traumatic brain hem nec*
ICD9DX	853.00	traumatic brain hem nec
ICD9DX	853.01	brain hem nec w/o coma
ICD9DX	853.02	brain hem nec-brief coma
ICD9DX	853.03	brain hem nec-mod coma
ICD9DX	853.04	brain hem nec-proln coma
ICD9DX	853.05	brain hem nec-deep coma
ICD9DX	853.06	brain hem nec-coma nos
ICD9DX	853.09	brain hem nec-concussion
ICD9DX	853.1	brain hem nec w opn wnd*
ICD9DX	853.10	brain hem nec w opn wnd
ICD9DX	853.11	brain hem opn w/o coma
ICD9DX	853.12	brain hem opn-brf coma
ICD9DX	853.13	brain hem open-mod coma
ICD9DX	853.14	brain hem opn-proln coma
ICD9DX	853.15	brain hem open-deep coma
ICD9DX	853.16	brain hem open-coma nos
ICD9DX	853.19	brain hem opn-concussion
ICD9DX	866.01	kidney hematoma-closed
ICD9DX	866.02	kidney laceration-closed
ICD9DX	866.11	kidney hematoma-open
ICD9DX	866.12	kidney laceration-open
ICD10DX	G95.19	Other vascular myopathies
ICD10DX	H05.23	Hemorrhage of orbit
ICD10DX	H05.231	Hemorrhage of right orbit
ICD10DX	H05.232	Hemorrhage of left orbit
ICD10DX	H05.233	Hemorrhage of bilateral orbit
ICD10DX	H05.239	Hemorrhage of unspecified orbit
ICD10DX	H31.30	Unspecified choroidal hemorrhage
ICD10DX	H31.301	Unspecified choroidal hemorrhage, right eye
ICD10DX	H31.302	Unspecified choroidal hemorrhage, left eye
ICD10DX	H31.303	Unspecified choroidal hemorrhage, bilateral
ICD10DX	H31.309	Unspecified choroidal hemorrhage, unspecified eye
ICD10DX	H31.31	Expulsive choroidal hemorrhage
ICD10DX	H31.311	Expulsive choroidal hemorrhage, right eye
ICD10DX	H31.312	Expulsive choroidal hemorrhage, left eye
ICD10DX	H31.313	Expulsive choroidal hemorrhage, bilateral
ICD10DX	H31.319	Expulsive choroidal hemorrhage, unspecified eye
ICD10DX	H31.41	Hemorrhagic choroidal detachment

ICD10DX	H31.411	Hemorrhagic choroidal detachment, right eye
ICD10DX	H31.412	Hemorrhagic choroidal detachment, left eye
ICD10DX	H31.413	Hemorrhagic choroidal detachment, bilateral
ICD10DX	H31.419	Hemorrhagic choroidal detachment, unspecified eye
ICD10DX	H43.1	Vitreous hemorrhage
ICD10DX	H43.10	Vitreous hemorrhage, unspecified eye
ICD10DX	H43.11	Vitreous hemorrhage, right eye
ICD10DX	H43.12	Vitreous hemorrhage, left eye
ICD10DX	H43.13	Vitreous hemorrhage, bilateral
ICD10DX	H47.02	Hemorrhage in optic nerve sheath
ICD10DX	H47.021	Hemorrhage in optic nerve sheath, right eye
ICD10DX	H47.022	Hemorrhage in optic nerve sheath, left eye
ICD10DX	H47.023	Hemorrhage in optic nerve sheath, bilateral
ICD10DX	H47.029	Hemorrhage in optic nerve sheath, unspecified eye
ICD10DX	I23.0	Hemopericardium as current complication following AMI
ICD10DX	I31.2	Hemopericardium, not elsewhere classified
ICD10DX	I60	Nontraumatic subarachnoid hemorrhage
ICD10DX	I60.0	Ntrm subarach hemorrhage from carotid siphon and bifurcation
ICD10DX	I60.00	Ntrm subarach hemorrhage from unsp carotid siphon and bifurc
ICD10DX	I60.01	Ntrm subarach hemor from right carotid siphon and bifurc
ICD10DX	I60.02	Ntrm subarach hemorrhage from left carotid siphon and bifurc
ICD10DX	I60.1	Ntrm subarachnoid hemorrhage from middle cerebral artery
ICD10DX	I60.10	Ntrm subarach hemorrhage from unsp middle cerebral artery
ICD10DX	I60.11	Ntrm subarach hemorrhage from right middle cerebral artery
ICD10DX	I60.12	Ntrm subarach hemorrhage from left middle cerebral artery
ICD10DX	I60.2	Ntrm subarach hemorrhage from anterior communicating artery
ICD10DX	I60.3	Ntrm subarach hemorrhage from posterior communicating artery
ICD10DX	I60.30	Ntrm subarach hemor from unsp posterior communicating artery
ICD10DX	I60.31	Ntrm subarach hemor from right post communicating artery
ICD10DX	I60.32	Ntrm subarach hemor from left posterior communicating artery
ICD10DX	I60.4	Nontraumatic subarachnoid hemorrhage from basilar artery
ICD10DX	I60.5	Nontraumatic subarachnoid hemorrhage from vertebral artery
ICD10DX	I60.50	Nontraumatic subarachnoid hemorrhage from unsp verteb art
ICD10DX	I60.51	Nontraumatic subarachnoid hemorrhage from r verteb art
ICD10DX	I60.52	Nontraumatic subarachnoid hemorrhage from l verteb art
ICD10DX	I60.6	Nontraumatic subarachnoid hemorrhage from oth intracran art
ICD10DX	I60.7	Nontraumatic subarachnoid hemorrhage from unsp intracran art
ICD10DX	I60.8	Other nontraumatic subarachnoid hemorrhage
ICD10DX	I60.9	Nontraumatic subarachnoid hemorrhage, unspecified
ICD10DX	I61	Nontraumatic intracerebral hemorrhage
ICD10DX	I61.0	Nontraumatic interbl hemorrhage in hemisphere, subcortical
ICD10DX	I61.1	Nontraumatic interbl hemorrhage in hemisphere, cortical
ICD10DX	I61.2	Nontraumatic intracerebral hemorrhage in hemisphere, unsp
ICD10DX	I61.3	Nontraumatic intracerebral hemorrhage in brain stem
ICD10DX	I61.4	Nontraumatic intracerebral hemorrhage in cerebellum

ICD10DX	I61.5	Nontraumatic intracerebral hemorrhage, intraventricular
ICD10DX	I61.6	Nontraumatic intracerebral hemorrhage, multiple localized
ICD10DX	I61.8	Other nontraumatic intracerebral hemorrhage
ICD10DX	I61.9	Nontraumatic intracerebral hemorrhage, unspecified
ICD10DX	I62	Other and unspecified nontraumatic intracranial hemorrhage
ICD10DX	I62.0	Nontraumatic subdural hemorrhage
ICD10DX	I62.00	Nontraumatic subdural hemorrhage, unspecified
ICD10DX	I62.01	Nontraumatic acute subdural hemorrhage
ICD10DX	I62.02	Nontraumatic subacute subdural hemorrhage
ICD10DX	I62.03	Nontraumatic chronic subdural hemorrhage
ICD10DX	I62.1	Nontraumatic extradural hemorrhage
ICD10DX	I62.9	Nontraumatic intracranial hemorrhage, unspecified
ICD10DX	K66.1	Hemoperitoneum
ICD10DX	M25.0	Hemarthrosis
ICD10DX	M25.00	Hemarthrosis, unspecified joint
ICD10DX	M25.01	Hemarthrosis, shoulder
ICD10DX	M25.011	Hemarthrosis, right shoulder
ICD10DX	M25.012	Hemarthrosis, left shoulder
ICD10DX	M25.019	Hemarthrosis, unspecified shoulder
ICD10DX	M25.02	Hemarthrosis, elbow
ICD10DX	M25.021	Hemarthrosis, right elbow
ICD10DX	M25.022	Hemarthrosis, left elbow
ICD10DX	M25.029	Hemarthrosis, unspecified elbow
ICD10DX	M25.03	Hemarthrosis, wrist
ICD10DX	M25.031	Hemarthrosis, right wrist
ICD10DX	M25.032	Hemarthrosis, left wrist
ICD10DX	M25.039	Hemarthrosis, unspecified wrist
ICD10DX	M25.04	Hemarthrosis, hand
ICD10DX	M25.041	Hemarthrosis, right hand
ICD10DX	M25.042	Hemarthrosis, left hand
ICD10DX	M25.049	Hemarthrosis, unspecified hand
ICD10DX	M25.05	Hemarthrosis, hip
ICD10DX	M25.051	Hemarthrosis, right hip
ICD10DX	M25.052	Hemarthrosis, left hip
ICD10DX	M25.059	Hemarthrosis, unspecified hip
ICD10DX	M25.06	Hemarthrosis, knee
ICD10DX	M25.061	Hemarthrosis, right knee
ICD10DX	M25.062	Hemarthrosis, left knee
ICD10DX	M25.069	Hemarthrosis, unspecified knee
ICD10DX	M25.07	Hemarthrosis, ankle and foot
ICD10DX	M25.071	Hemarthrosis, right ankle
ICD10DX	M25.072	Hemarthrosis, left ankle
ICD10DX	M25.073	Hemarthrosis, unspecified ankle
ICD10DX	M25.074	Hemarthrosis, right foot
ICD10DX	M25.075	Hemarthrosis, left foot

ICD10DX	M25.076	Hemarthrosis, unspecified foot
ICD10DX	M25.08	Hemarthrosis, other specified site
ICD10DX	M79.81	Nontraumatic hematoma of soft tissue
ICD10DX	S06.4	Epidural hemorrhage
ICD10DX	S06.4X	Epidural hemorrhage
ICD10DX	S06.4X0	Epidural hemorrhage without loss of consciousness
ICD10DX	S06.4X0A	Epidural hemorrhage w/o loss of consciousness, init encntr
ICD10DX	S06.4X0D	Epidural hemorrhage w/o loss of consciousness, subs encntr
ICD10DX	S06.4X0S	Epidural hemorrhage without loss of consciousness, sequela
ICD10DX	S06.4X1	Epidural hemorrhage w LOC of 30 minutes or less
ICD10DX	S06.4X1A	Epidural hemorrhage w LOC of 30 minutes or less, init
ICD10DX	S06.4X1D	Epidural hemorrhage w LOC of 30 minutes or less, subs
ICD10DX	S06.4X1S	Epidural hemorrhage w LOC of 30 minutes or less, sequela
ICD10DX	S06.4X2	Epidural hemorrhage w loss of consciousness of 31-59 min
ICD10DX	S06.4X2A	Epidural hemorrhage w LOC of 31-59 min, init
ICD10DX	S06.4X2D	Epidural hemorrhage w LOC of 31-59 min, subs
ICD10DX	S06.4X2S	Epidural hemorrhage w LOC of 31-59 min, sequela
ICD10DX	S06.4X3	Epidural hemorrhage w LOC of 1-5 hrs 59 min
ICD10DX	S06.4X3A	Epidural hemorrhage w LOC of 1-5 hrs 59 min, init
ICD10DX	S06.4X3D	Epidural hemorrhage w LOC of 1-5 hrs 59 min, subs
ICD10DX	S06.4X3S	Epidural hemorrhage w LOC of 1-5 hrs 59 min, sequela
ICD10DX	S06.4X4	Epidural hemorrhage w LOC of 6 hours to 24 hours
ICD10DX	S06.4X4A	Epidural hemorrhage w LOC of 6 hours to 24 hours, init
ICD10DX	S06.4X4D	Epidural hemorrhage w LOC of 6 hours to 24 hours, subs
ICD10DX	S06.4X4S	Epidural hemorrhage w LOC of 6 hours to 24 hours, sequela
ICD10DX	S06.4X5	Epidural hemorrhage w LOC >24 hr w ret consc lev
ICD10DX	S06.4X5A	Epidural hemorrhage w LOC >24 hr w ret consc lev, init
ICD10DX	S06.4X5D	Epidural hemorrhage w LOC >24 hr w ret consc lev, subs
ICD10DX	S06.4X5S	Epidural hemorrhage w LOC >24 hr w ret consc lev, sequela
ICD10DX	S06.4X6	Epidural hemorrhage w LOC >24 hr w/o ret consc w surv
ICD10DX	S06.4X6A	Epidural hemorrhage w LOC >24 hr w/o ret consc w surv, init
ICD10DX	S06.4X6D	Epidural hemorrhage w LOC >24 hr w/o ret consc w surv, subs
ICD10DX	S06.4X6S	Epidural hemorrhage w LOC >24 hr w/o ret consc w surv, sequela
ICD10DX	S06.4X7	Epidural hemorrhage w LOC w death due to brain injury bf consc
ICD10DX	S06.4X7A	Epidural hemorrhage w LOC w death d/t brain injury bf consc, init
ICD10DX	S06.4X8	Epidural hemorrhage w LOC w death due to oth causes bf consc
ICD10DX	S06.4X8A	Epidural hemorrhage w LOC w death due to oth causes bf consc, init
ICD10DX	S06.4X9	Epidural hemorrhage w loss of consciousness of unsp duration
ICD10DX	S06.4X9A	Epidural hemorrhage w LOC of unsp duration, init
ICD10DX	S06.4X9D	Epidural hemorrhage w LOC of unsp duration, subs
ICD10DX	S06.4X9S	Epidural hemorrhage w LOC of unsp duration, sequela
ICD10DX	S06.5	Traumatic subdural hemorrhage
ICD10DX	S06.5X	Traumatic subdural hemorrhage
ICD10DX	S06.5X0	Traumatic subdural hemorrhage without loss of consciousness
ICD10DX	S06.5X0A	Traumatic subdural hemorrhage w/o loss of consciousness, init

ICD10DX	S06.5X0D	Traum subdr hem w/o loss of consciousness, subs
ICD10DX	S06.5X0S	Traum subdr hem w/o loss of consciousness, sequela
ICD10DX	S06.5X1	Traum subdr hem w LOC of 30 minutes or less
ICD10DX	S06.5X1A	Traum subdr hem w LOC of 30 minutes or less, init
ICD10DX	S06.5X1D	Traum subdr hem w LOC of 30 minutes or less, subs
ICD10DX	S06.5X1S	Traum subdr hem w LOC of 30 minutes or less, sequela
ICD10DX	S06.5X2	Traum subdr hem w loss of consciousness of 31-59 min
ICD10DX	S06.5X2A	Traum subdr hem w loss of consciousness of 31-59 min, init
ICD10DX	S06.5X2D	Traum subdr hem w loss of consciousness of 31-59 min, subs
ICD10DX	S06.5X2S	Traum subdr hem w LOC of 31-59 min, sequela
ICD10DX	S06.5X3	Traum subdr hem w loss of consciousness of 1-5 hrs 59 min
ICD10DX	S06.5X3A	Traum subdr hem w LOC of 1-5 hrs 59 min, init
ICD10DX	S06.5X3D	Traum subdr hem w LOC of 1-5 hrs 59 min, subs
ICD10DX	S06.5X3S	Traum subdr hem w LOC of 1-5 hrs 59 min, sequela
ICD10DX	S06.5X4	Traum subdr hem w LOC of 6 hours to 24 hours
ICD10DX	S06.5X4A	Traum subdr hem w LOC of 6 hours to 24 hours, init
ICD10DX	S06.5X4D	Traum subdr hem w LOC of 6 hours to 24 hours, subs
ICD10DX	S06.5X4S	Traum subdr hem w LOC of 6 hours to 24 hours, sequela
ICD10DX	S06.5X5	Traum subdr hem w LOC >24 hr w ret consc lev
ICD10DX	S06.5X5A	Traum subdr hem w LOC >24 hr w ret consc lev, init
ICD10DX	S06.5X5D	Traum subdr hem w LOC >24 hr w ret consc lev, subs
ICD10DX	S06.5X5S	Traum subdr hem w LOC >24 hr w ret consc lev, sequela
ICD10DX	S06.5X6	Traum subdr hem w LOC >24 hr w/o ret consc w surv
ICD10DX	S06.5X6A	Traum subdr hem w LOC >24 hr w/o ret consc w surv, init
ICD10DX	S06.5X6D	Traum subdr hem w LOC >24 hr w/o ret consc w surv, subs
ICD10DX	S06.5X6S	Traum subdr hem w LOC >24 hr w/o ret consc w surv, sequela
ICD10DX	S06.5X7	Traum subdr hem w LOC w death d/t brain injury bef reg consc
ICD10DX	S06.5X7A	Traum subdr hem w LOC w dth d/t brain inj bef reg consc,init
ICD10DX	S06.5X8	Traum subdr hem w LOC w death due to oth cause bef reg consc
ICD10DX	S06.5X8A	Traum subdr hem w LOC w dth d/t oth cause bef reg consc,init
ICD10DX	S06.5X9	Traum subdr hem w loss of consciousness of unsp duration
ICD10DX	S06.5X9A	Traum subdr hem w LOC of unsp duration, init
ICD10DX	S06.5X9D	Traum subdr hem w LOC of unsp duration, subs
ICD10DX	S06.5X9S	Traum subdr hem w LOC of unsp duration, sequela
ICD10DX	S06.6	Traumatic subarachnoid hemorrhage
ICD10DX	S06.6X	Traumatic subarachnoid hemorrhage
ICD10DX	S06.6X0	Traumatic subarachnoid hemorrhage w/o loss of consciousness
ICD10DX	S06.6X0A	Traum subrac hem w/o loss of consciousness, init
ICD10DX	S06.6X0D	Traum subrac hem w/o loss of consciousness, subs
ICD10DX	S06.6X0S	Traum subrac hem w/o loss of consciousness, sequela
ICD10DX	S06.6X1	Traum subrac hem w LOC of 30 minutes or less
ICD10DX	S06.6X1A	Traum subrac hem w LOC of 30 minutes or less, init
ICD10DX	S06.6X1D	Traum subrac hem w LOC of 30 minutes or less, subs
ICD10DX	S06.6X1S	Traum subrac hem w LOC of 30 minutes or less, sequela
ICD10DX	S06.6X2	Traum subrac hem w loss of consciousness of 31-59 min

ICD10DX	S06.6X2A	Traum subrac hem w loss of consciousness of 31-59 min, init
ICD10DX	S06.6X2D	Traum subrac hem w loss of consciousness of 31-59 min, subs
ICD10DX	S06.6X2S	Traum subrac hem w LOC of 31-59 min, sequela
ICD10DX	S06.6X3	Traum subrac hem w loss of consciousness of 1-5 hrs 59 min
ICD10DX	S06.6X3A	Traum subrac hem w LOC of 1-5 hrs 59 min, init
ICD10DX	S06.6X3D	Traum subrac hem w LOC of 1-5 hrs 59 min, subs
ICD10DX	S06.6X3S	Traum subrac hem w LOC of 1-5 hrs 59 min, sequela
ICD10DX	S06.6X4	Traum subrac hem w LOC of 6 hours to 24 hours
ICD10DX	S06.6X4A	Traum subrac hem w LOC of 6 hours to 24 hours, init
ICD10DX	S06.6X4D	Traum subrac hem w LOC of 6 hours to 24 hours, subs
ICD10DX	S06.6X4S	Traum subrac hem w LOC of 6 hours to 24 hours, sequela
ICD10DX	S06.6X5	Traum subrac hem w LOC >24 hr w ret consc lev
ICD10DX	S06.6X5A	Traum subrac hem w LOC >24 hr w ret consc lev, init
ICD10DX	S06.6X5D	Traum subrac hem w LOC >24 hr w ret consc lev, subs
ICD10DX	S06.6X5S	Traum subrac hem w LOC >24 hr w ret consc lev, sequela
ICD10DX	S06.6X6	Traum subrac hem w LOC >24 hr w/o ret consc w surv
ICD10DX	S06.6X6A	Traum subrac hem w LOC >24 hr w/o ret consc w surv, init
ICD10DX	S06.6X6D	Traum subrac hem w LOC >24 hr w/o ret consc w surv, subs
ICD10DX	S06.6X6S	Traum subrac hem w LOC >24 hr w/o ret consc w surv, sequela
ICD10DX	S06.6X7	Traum subrac hem w LOC w death due to brain injury bf consc
ICD10DX	S06.6X7A	Traum subrac hem w LOC w death d/t brain inj bf consc, init
ICD10DX	S06.6X8	Traum subrac hem w LOC w death due to oth cause bf consc
ICD10DX	S06.6X8A	Traum subrac hem w LOC w death d/t oth cause bf consc, init
ICD10DX	S06.6X9	Traum subrac hem w loss of consciousness of unsp duration
ICD10DX	S06.6X9A	Traum subrac hem w LOC of unsp duration, init
ICD10DX	S06.6X9D	Traum subrac hem w LOC of unsp duration, subs
ICD10DX	S06.6X9S	Traum subrac hem w LOC of unsp duration, sequela
ICD10DX	S26.0	Injury of heart with hemopericardium
ICD10DX	S26.00	Unspecified injury of heart with hemopericardium
ICD10DX	S26.00XA	Unsp injury of heart with hemopericardium, init encntr
ICD10DX	S26.00XD	Unsp injury of heart with hemopericardium, subs encntr
ICD10DX	S26.00XS	Unspecified injury of heart with hemopericardium, sequela
ICD10DX	S26.01	Contusion of heart with hemopericardium
ICD10DX	S26.01XA	Contusion of heart with hemopericardium, initial encounter
ICD10DX	S26.01XD	Contusion of heart with hemopericardium, subs encntr
ICD10DX	S26.01XS	Contusion of heart with hemopericardium, sequela
ICD10DX	S26.02	Laceration of heart with hemopericardium
ICD10DX	S26.020	Mild laceration of heart with hemopericardium
ICD10DX	S26.020A	Mild laceration of heart with hemopericardium, init encntr
ICD10DX	S26.020D	Mild laceration of heart with hemopericardium, subs encntr
ICD10DX	S26.020S	Mild laceration of heart with hemopericardium, sequela
ICD10DX	S26.021	Moderate laceration of heart with hemopericardium
ICD10DX	S26.021A	Moderate laceration of heart w hemopericardium, init encntr
ICD10DX	S26.021D	Moderate laceration of heart w hemopericardium, subs encntr
ICD10DX	S26.021S	Moderate laceration of heart with hemopericardium, sequela

ICD10DX	S26.022	Major laceration of heart with hemopericardium
ICD10DX	S26.022A	Major laceration of heart with hemopericardium, init encntr
ICD10DX	S26.022D	Major laceration of heart with hemopericardium, subs encntr
ICD10DX	S26.022S	Major laceration of heart with hemopericardium, sequela
ICD10DX	S26.09	Other injury of heart with hemopericardium
ICD10DX	S26.09XA	Other injury of heart with hemopericardium, init encntr
ICD10DX	S26.09XD	Other injury of heart with hemopericardium, subs encntr
ICD10DX	S26.09XS	Other injury of heart with hemopericardium, sequela
ICD10DX	S37.01	Minor contusion of kidney
ICD10DX	S37.011	Minor contusion of right kidney
ICD10DX	S37.011A	Minor contusion of right kidney, initial encounter
ICD10DX	S37.011D	Minor contusion of right kidney, subsequent encounter
ICD10DX	S37.011S	Minor contusion of right kidney, sequela
ICD10DX	S37.012	Minor contusion of left kidney
ICD10DX	S37.012A	Minor contusion of left kidney, initial encounter
ICD10DX	S37.012D	Minor contusion of left kidney, subsequent encounter
ICD10DX	S37.012S	Minor contusion of left kidney, sequela
ICD10DX	S37.019	Minor contusion of unspecified kidney
ICD10DX	S37.019A	Minor contusion of unspecified kidney, initial encounter
ICD10DX	S37.019D	Minor contusion of unspecified kidney, subsequent encounter
ICD10DX	S37.019S	Minor contusion of unspecified kidney, sequela
ICD10DX	S37.02	Major contusion of kidney
ICD10DX	S37.021	Major contusion of right kidney
ICD10DX	S37.021A	Major contusion of right kidney, initial encounter
ICD10DX	S37.021D	Major contusion of right kidney, subsequent encounter
ICD10DX	S37.021S	Major contusion of right kidney, sequela
ICD10DX	S37.022	Major contusion of left kidney
ICD10DX	S37.022A	Major contusion of left kidney, initial encounter
ICD10DX	S37.022D	Major contusion of left kidney, subsequent encounter
ICD10DX	S37.022S	Major contusion of left kidney, sequela
ICD10DX	S37.029	Major contusion of unspecified kidney
ICD10DX	S37.029A	Major contusion of unspecified kidney, initial encounter
ICD10DX	S37.029D	Major contusion of unspecified kidney, subsequent encounter
ICD10DX	S37.029S	Major contusion of unspecified kidney, sequela
ICD10DX	S37.03	Laceration of kidney, unspecified degree
ICD10DX	S37.031	Laceration of right kidney, unspecified degree
ICD10DX	S37.031A	Laceration of right kidney, unspecified degree, init encntr
ICD10DX	S37.031D	Laceration of right kidney, unspecified degree, subs encntr
ICD10DX	S37.031S	Laceration of right kidney, unspecified degree, sequela
ICD10DX	S37.032	Laceration of left kidney, unspecified degree
ICD10DX	S37.032A	Laceration of left kidney, unspecified degree, init encntr
ICD10DX	S37.032D	Laceration of left kidney, unspecified degree, subs encntr
ICD10DX	S37.032S	Laceration of left kidney, unspecified degree, sequela
ICD10DX	S37.039	Laceration of unspecified kidney, unspecified degree
ICD10DX	S37.039A	Laceration of unsp kidney, unspecified degree, init encntr

ICD10DX	S37.039D	Laceration of unsp kidney, unspecified degree, subs encntr
ICD10DX	S37.039S	Laceration of unsp kidney, unspecified degree, sequela
ICD10DX	S37.04	Minor laceration of kidney
ICD10DX	S37.041	Minor laceration of right kidney
ICD10DX	S37.041A	Minor laceration of right kidney, initial encounter
ICD10DX	S37.041D	Minor laceration of right kidney, subsequent encounter
ICD10DX	S37.041S	Minor laceration of right kidney, sequela
ICD10DX	S37.042	Minor laceration of left kidney
ICD10DX	S37.042A	Minor laceration of left kidney, initial encounter
ICD10DX	S37.042D	Minor laceration of left kidney, subsequent encounter
ICD10DX	S37.042S	Minor laceration of left kidney, sequela
ICD10DX	S37.049	Minor laceration of unspecified kidney
ICD10DX	S37.049A	Minor laceration of unspecified kidney, initial encounter
ICD10DX	S37.049D	Minor laceration of unspecified kidney, subsequent encounter
ICD10DX	S37.049S	Minor laceration of unspecified kidney, sequela
ICD10DX	S37.05	Moderate laceration of kidney
ICD10DX	S37.051	Moderate laceration of right kidney
ICD10DX	S37.051A	Moderate laceration of right kidney, initial encounter
ICD10DX	S37.051D	Moderate laceration of right kidney, subsequent encounter
ICD10DX	S37.051S	Moderate laceration of right kidney, sequela
ICD10DX	S37.052	Moderate laceration of left kidney
ICD10DX	S37.052A	Moderate laceration of left kidney, initial encounter
ICD10DX	S37.052D	Moderate laceration of left kidney, subsequent encounter
ICD10DX	S37.052S	Moderate laceration of left kidney, sequela
ICD10DX	S37.059	Moderate laceration of unspecified kidney
ICD10DX	S37.059A	Moderate laceration of unspecified kidney, initial encounter
ICD10DX	S37.059D	Moderate laceration of unspecified kidney, subs encntr
ICD10DX	S37.059S	Moderate laceration of unspecified kidney, sequela
ICD10DX	S37.06	Major laceration of kidney
ICD10DX	S37.061	Major laceration of right kidney
ICD10DX	S37.061A	Major laceration of right kidney, initial encounter
ICD10DX	S37.061D	Major laceration of right kidney, subsequent encounter
ICD10DX	S37.061S	Major laceration of right kidney, sequela
ICD10DX	S37.062	Major laceration of left kidney
ICD10DX	S37.062A	Major laceration of left kidney, initial encounter
ICD10DX	S37.062D	Major laceration of left kidney, subsequent encounter
ICD10DX	S37.062S	Major laceration of left kidney, sequela
ICD10DX	S37.069	Major laceration of unspecified kidney
ICD10DX	S37.069A	Major laceration of unspecified kidney, initial encounter
ICD10DX	S37.069D	Major laceration of unspecified kidney, subsequent encounter
ICD10DX	S37.069S	Major laceration of unspecified kidney, sequela

## Intracranial Bleeding

SOURCE	CODE	DESCRIPTION
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ICD9DX	430	subarachnoid hemorrhage
ICD9DX	431	intracerebral hemorrhage
ICD9DX	432	intracranial hem nec/nos*
ICD9DX	432.0	nontraum extradural hem
ICD9DX	432.1	subdural hemorrhage
ICD9DX	432.9	intracranial hemorr nos
ICD9DX	852	meningeal hem follow inj*
ICD9DX	852.0	traum subarachnoid hem*
ICD9DX	852.00	traum subarachnoid hem
ICD9DX	852.01	subarachnoid hem-no coma
ICD9DX	852.02	subarach hem-brief coma
ICD9DX	852.03	subarach hem-mod coma
ICD9DX	852.04	subarach hem-prolonged coma
ICD9DX	852.05	subarach hem-deep coma
ICD9DX	852.06	subarach hem-coma nos
ICD9DX	852.09	subarach hem-concussion
ICD9DX	852.1	subarach hem w opn wound*
ICD9DX	852.10	subarach hem w opn wound
ICD9DX	852.11	opn subarach hem-no coma
ICD9DX	852.12	op subarach hem-brf coma
ICD9DX	852.13	op subarach hem-mod coma
ICD9DX	852.14	op subarach hem-prolonged coma
ICD9DX	852.15	op subarach hem-deep coma
ICD9DX	852.16	op subarach hem-coma nos
ICD9DX	852.19	opn subarach hem-concuss
ICD9DX	852.2	traumatic subdural hem*
ICD9DX	852.20	traumatic subdural hem
ICD9DX	852.21	subdural hem w/o coma
ICD9DX	852.22	subdural hem-brief coma
ICD9DX	852.23	subdural hemorr-mod coma
ICD9DX	852.24	subdural hem-prolonged coma
ICD9DX	852.25	subdural hem-deep coma
ICD9DX	852.26	subdural hemorr-coma nos
ICD9DX	852.29	subdural hem-concussion
ICD9DX	852.3	subdural hem w opn wound*
ICD9DX	852.30	subdural hem w opn wound
ICD9DX	852.31	open subdur hem w/o coma
ICD9DX	852.32	opn subdur hem-brf coma
ICD9DX	852.33	opn subdur hem-mod coma
ICD9DX	852.34	opn subdur hem-prolonged coma
ICD9DX	852.35	opn subdur hem-deep coma
ICD9DX	852.36	opn subdur hem-coma nos
ICD9DX	852.39	opn subdur hem-concuss
ICD9DX	852.4	traumatic extradural hem*
ICD9DX	852.40	traumatic extradural hem

ICD9DX	852.41	extradural hem w/o coma
ICD9DX	852.42	extradur hem-brief coma
ICD9DX	852.43	extradural hem-mod coma
ICD9DX	852.44	extradur hem-proln coma
ICD9DX	852.45	extradural hem-deep coma
ICD9DX	852.46	extradural hem-coma nos
ICD9DX	852.49	extadural hem-concuss
ICD9DX	852.5	extradural hem w opn wnd*
ICD9DX	852.50	extradural hem w opn wnd
ICD9DX	852.51	extradural hemor-no coma
ICD9DX	852.52	extradur hem-brief coma
ICD9DX	852.53	extradural hem-mod coma
ICD9DX	852.54	extradur hem-proln coma
ICD9DX	852.55	extradur hem-deep coma
ICD9DX	852.56	extradural hem-coma nos
ICD9DX	852.59	extradural hem-concuss
ICD9DX	853	oth traumatic brain hem*
ICD9DX	853.0	traumatic brain hem nec*
ICD9DX	853.00	traumatic brain hem nec
ICD9DX	853.01	brain hem nec w/o coma
ICD9DX	853.02	brain hem nec-brief coma
ICD9DX	853.03	brain hem nec-mod coma
ICD9DX	853.04	brain hem nec-proln coma
ICD9DX	853.05	brain hem nec-deep coma
ICD9DX	853.06	brain hem nec-coma nos
ICD9DX	853.09	brain hem nec-concussion
ICD9DX	853.1	brain hem nec w opn wnd*
ICD9DX	853.10	brain hem nec w opn wnd
ICD9DX	853.11	brain hem opn w/o coma
ICD9DX	853.12	brain hem opn-brf coma
ICD9DX	853.13	brain hem open-mod coma
ICD9DX	853.14	brain hem opn-proln coma
ICD9DX	853.15	brain hem open-deep coma
ICD9DX	853.16	brain hem open-coma nos
ICD9DX	853.19	brain hem opn-concussion
ICD10DX	I60	Nontraumatic subarachnoid hemorrhage
ICD10DX	I60.0	Ntrm subarach hemorrhage from carotid siphon and bifurcation
ICD10DX	I60.00	Ntrm subarach hemorrhage from unsp carotid siphon and bifurc
ICD10DX	I60.01	Ntrm subarach hemor from right carotid siphon and bifurc
ICD10DX	I60.02	Ntrm subarach hemorrhage from left carotid siphon and bifurc
ICD10DX	I60.1	Ntrm subarachnoid hemorrhage from middle cerebral artery
ICD10DX	I60.10	Ntrm subarach hemorrhage from unsp middle cerebral artery
ICD10DX	I60.11	Ntrm subarach hemorrhage from right middle cerebral artery
ICD10DX	I60.12	Ntrm subarach hemorrhage from left middle cerebral artery
ICD10DX	I60.2	Ntrm subarach hemorrhage from anterior communicating artery

ICD10DX	I60.3	Ntrm subarach hemorrhage from posterior communicating artery
ICD10DX	I60.30	Ntrm subarach hemor from unsp posterior communicating artery
ICD10DX	I60.31	Ntrm subarach hemor from right post communicating artery
ICD10DX	I60.32	Ntrm subarach hemor from left posterior communicating artery
ICD10DX	I60.4	Nontraumatic subarachnoid hemorrhage from basilar artery
ICD10DX	I60.5	Nontraumatic subarachnoid hemorrhage from vertebral artery
ICD10DX	I60.50	Nontraumatic subarachnoid hemorrhage from unsp verteb art
ICD10DX	I60.51	Nontraumatic subarachnoid hemorrhage from r verteb art
ICD10DX	I60.52	Nontraumatic subarachnoid hemorrhage from l verteb art
ICD10DX	I60.6	Nontraumatic subarachnoid hemorrhage from oth intracran art
ICD10DX	I60.7	Nontraumatic subarachnoid hemorrhage from unsp intracran art
ICD10DX	I60.8	Other nontraumatic subarachnoid hemorrhage
ICD10DX	I60.9	Nontraumatic subarachnoid hemorrhage, unspecified
ICD10DX	I61	Nontraumatic intracerebral hemorrhage
ICD10DX	I61.0	Nontraumatic intercbl hemorrhage in hemisphere, subcortical
ICD10DX	I61.1	Nontraumatic intercbl hemorrhage in hemisphere, cortical
ICD10DX	I61.2	Nontraumatic intracerebral hemorrhage in hemisphere, unsp
ICD10DX	I61.3	Nontraumatic intracerebral hemorrhage in brain stem
ICD10DX	I61.4	Nontraumatic intracerebral hemorrhage in cerebellum
ICD10DX	I61.5	Nontraumatic intracerebral hemorrhage, intraventricular
ICD10DX	I61.6	Nontraumatic intracerebral hemorrhage, multiple localized
ICD10DX	I61.8	Other nontraumatic intracerebral hemorrhage
ICD10DX	I61.9	Nontraumatic intracerebral hemorrhage, unspecified
ICD10DX	I62	Other and unspecified nontraumatic intracranial hemorrhage
ICD10DX	I62.0	Nontraumatic subdural hemorrhage
ICD10DX	I62.00	Nontraumatic subdural hemorrhage, unspecified
ICD10DX	I62.01	Nontraumatic acute subdural hemorrhage
ICD10DX	I62.02	Nontraumatic subacute subdural hemorrhage
ICD10DX	I62.03	Nontraumatic chronic subdural hemorrhage
ICD10DX	I62.1	Nontraumatic extradural hemorrhage
ICD10DX	I62.9	Nontraumatic intracranial hemorrhage, unspecified
ICD10DX	S06.4	Epidural hemorrhage
ICD10DX	S06.4X	Epidural hemorrhage
ICD10DX	S06.4X0	Epidural hemorrhage without loss of consciousness
ICD10DX	S06.4X0A	Epidural hemorrhage w/o loss of consciousness, init encntr
ICD10DX	S06.4X0D	Epidural hemorrhage w/o loss of consciousness, subs encntr
ICD10DX	S06.4X0S	Epidural hemorrhage without loss of consciousness, sequela
ICD10DX	S06.4X1	Epidural hemorrhage w LOC of 30 minutes or less
ICD10DX	S06.4X1A	Epidural hemorrhage w LOC of 30 minutes or less, init
ICD10DX	S06.4X1D	Epidural hemorrhage w LOC of 30 minutes or less, subs
ICD10DX	S06.4X1S	Epidural hemorrhage w LOC of 30 minutes or less, sequela
ICD10DX	S06.4X2	Epidural hemorrhage w loss of consciousness of 31-59 min
ICD10DX	S06.4X2A	Epidural hemorrhage w LOC of 31-59 min, init
ICD10DX	S06.4X2D	Epidural hemorrhage w LOC of 31-59 min, subs
ICD10DX	S06.4X2S	Epidural hemorrhage w LOC of 31-59 min, sequela

ICD10DX	S06.4X3	Epidural hemorrhage w LOC of 1-5 hrs 59 min
ICD10DX	S06.4X3A	Epidural hemorrhage w LOC of 1-5 hrs 59 min, init
ICD10DX	S06.4X3D	Epidural hemorrhage w LOC of 1-5 hrs 59 min, subs
ICD10DX	S06.4X3S	Epidural hemorrhage w LOC of 1-5 hrs 59 min, sequela
ICD10DX	S06.4X4	Epidural hemorrhage w LOC of 6 hours to 24 hours
ICD10DX	S06.4X4A	Epidural hemorrhage w LOC of 6 hours to 24 hours, init
ICD10DX	S06.4X4D	Epidural hemorrhage w LOC of 6 hours to 24 hours, subs
ICD10DX	S06.4X4S	Epidural hemorrhage w LOC of 6 hours to 24 hours, sequela
ICD10DX	S06.4X5	Epidural hemorrhage w LOC >24 hr w ret consc lev
ICD10DX	S06.4X5A	Epidural hemorrhage w LOC >24 hr w ret consc lev, init
ICD10DX	S06.4X5D	Epidural hemorrhage w LOC >24 hr w ret consc lev, subs
ICD10DX	S06.4X5S	Epidural hemorrhage w LOC >24 hr w ret consc lev, sequela
ICD10DX	S06.4X6	Epidural hemorrhage w LOC >24 hr w/o ret consc w surv
ICD10DX	S06.4X6A	Epidural hemorrhage w LOC >24 hr w/o ret consc w surv, init
ICD10DX	S06.4X6D	Epidural hemorrhage w LOC >24 hr w/o ret consc w surv, subs
ICD10DX	S06.4X6S	Epidural hemorrhage w LOC >24 hr w/o ret consc w surv, sequela
ICD10DX	S06.4X7	Epidural hemorrhage w LOC w death due to brain injury bf consc
ICD10DX	S06.4X7A	Epidural hemorrhage w LOC w death d/t brain injury bf consc, init
ICD10DX	S06.4X8	Epidural hemorrhage w LOC w death due to oth causes bf consc
ICD10DX	S06.4X8A	Epidural hemorrhage w LOC w death due to oth causes bf consc, init
ICD10DX	S06.4X9	Epidural hemorrhage w loss of consciousness of unsp duration
ICD10DX	S06.4X9A	Epidural hemorrhage w LOC of unsp duration, init
ICD10DX	S06.4X9D	Epidural hemorrhage w LOC of unsp duration, subs
ICD10DX	S06.4X9S	Epidural hemorrhage w LOC of unsp duration, sequela
ICD10DX	S06.5	Traumatic subdural hemorrhage
ICD10DX	S06.5X	Traumatic subdural hemorrhage
ICD10DX	S06.5X0	Traumatic subdural hemorrhage without loss of consciousness
ICD10DX	S06.5X0A	Traum subdr hem w/o loss of consciousness, init
ICD10DX	S06.5X0D	Traum subdr hem w/o loss of consciousness, subs
ICD10DX	S06.5X0S	Traum subdr hem w/o loss of consciousness, sequela
ICD10DX	S06.5X1	Traum subdr hem w LOC of 30 minutes or less
ICD10DX	S06.5X1A	Traum subdr hem w LOC of 30 minutes or less, init
ICD10DX	S06.5X1D	Traum subdr hem w LOC of 30 minutes or less, subs
ICD10DX	S06.5X1S	Traum subdr hem w LOC of 30 minutes or less, sequela
ICD10DX	S06.5X2	Traum subdr hem w loss of consciousness of 31-59 min
ICD10DX	S06.5X2A	Traum subdr hem w loss of consciousness of 31-59 min, init
ICD10DX	S06.5X2D	Traum subdr hem w loss of consciousness of 31-59 min, subs
ICD10DX	S06.5X2S	Traum subdr hem w LOC of 31-59 min, sequela
ICD10DX	S06.5X3	Traum subdr hem w loss of consciousness of 1-5 hrs 59 min
ICD10DX	S06.5X3A	Traum subdr hem w LOC of 1-5 hrs 59 min, init
ICD10DX	S06.5X3D	Traum subdr hem w LOC of 1-5 hrs 59 min, subs
ICD10DX	S06.5X3S	Traum subdr hem w LOC of 1-5 hrs 59 min, sequela
ICD10DX	S06.5X4	Traum subdr hem w LOC of 6 hours to 24 hours
ICD10DX	S06.5X4A	Traum subdr hem w LOC of 6 hours to 24 hours, init
ICD10DX	S06.5X4D	Traum subdr hem w LOC of 6 hours to 24 hours, subs

ICD10DX	S06.5X4S	Traum subdr hem w LOC of 6 hours to 24 hours, sequela
ICD10DX	S06.5X5	Traum subdr hem w LOC >24 hr w ret consc lev
ICD10DX	S06.5X5A	Traum subdr hem w LOC >24 hr w ret consc lev, init
ICD10DX	S06.5X5D	Traum subdr hem w LOC >24 hr w ret consc lev, subs
ICD10DX	S06.5X5S	Traum subdr hem w LOC >24 hr w ret consc lev, sequela
ICD10DX	S06.5X6	Traum subdr hem w LOC >24 hr w/o ret consc w surv
ICD10DX	S06.5X6A	Traum subdr hem w LOC >24 hr w/o ret consc w surv, init
ICD10DX	S06.5X6D	Traum subdr hem w LOC >24 hr w/o ret consc w surv, subs
ICD10DX	S06.5X6S	Traum subdr hem w LOC >24 hr w/o ret consc w surv, sequela
ICD10DX	S06.5X7	Traum subdr hem w LOC w death d/t brain injury bef reg consc
ICD10DX	S06.5X7A	Traum subdr hem w LOC w dth d/t brain inj bef reg consc,init
ICD10DX	S06.5X8	Traum subdr hem w LOC w death due to oth cause bef reg consc
ICD10DX	S06.5X8A	Traum subdr hem w LOC w dth d/t oth cause bef reg consc,init
ICD10DX	S06.5X9	Traum subdr hem w loss of consciousness of unsp duration
ICD10DX	S06.5X9A	Traum subdr hem w LOC of unsp duration, init
ICD10DX	S06.5X9D	Traum subdr hem w LOC of unsp duration, subs
ICD10DX	S06.5X9S	Traum subdr hem w LOC of unsp duration, sequela
ICD10DX	S06.6	Traumatic subarachnoid hemorrhage
ICD10DX	S06.6X	Traumatic subarachnoid hemorrhage
ICD10DX	S06.6X0	Traumatic subarachnoid hemorrhage w/o loss of consciousness
ICD10DX	S06.6X0A	Traum subrac hem w/o loss of consciousness, init
ICD10DX	S06.6X0D	Traum subrac hem w/o loss of consciousness, subs
ICD10DX	S06.6X0S	Traum subrac hem w/o loss of consciousness, sequela
ICD10DX	S06.6X1	Traum subrac hem w LOC of 30 minutes or less
ICD10DX	S06.6X1A	Traum subrac hem w LOC of 30 minutes or less, init
ICD10DX	S06.6X1D	Traum subrac hem w LOC of 30 minutes or less, subs
ICD10DX	S06.6X1S	Traum subrac hem w LOC of 30 minutes or less, sequela
ICD10DX	S06.6X2	Traum subrac hem w loss of consciousness of 31-59 min
ICD10DX	S06.6X2A	Traum subrac hem w loss of consciousness of 31-59 min, init
ICD10DX	S06.6X2D	Traum subrac hem w loss of consciousness of 31-59 min, subs
ICD10DX	S06.6X2S	Traum subrac hem w LOC of 31-59 min, sequela
ICD10DX	S06.6X3	Traum subrac hem w loss of consciousness of 1-5 hrs 59 min
ICD10DX	S06.6X3A	Traum subrac hem w LOC of 1-5 hrs 59 min, init
ICD10DX	S06.6X3D	Traum subrac hem w LOC of 1-5 hrs 59 min, subs
ICD10DX	S06.6X3S	Traum subrac hem w LOC of 1-5 hrs 59 min, sequela
ICD10DX	S06.6X4	Traum subrac hem w LOC of 6 hours to 24 hours
ICD10DX	S06.6X4A	Traum subrac hem w LOC of 6 hours to 24 hours, init
ICD10DX	S06.6X4D	Traum subrac hem w LOC of 6 hours to 24 hours, subs
ICD10DX	S06.6X4S	Traum subrac hem w LOC of 6 hours to 24 hours, sequela
ICD10DX	S06.6X5	Traum subrac hem w LOC >24 hr w ret consc lev
ICD10DX	S06.6X5A	Traum subrac hem w LOC >24 hr w ret consc lev, init
ICD10DX	S06.6X5D	Traum subrac hem w LOC >24 hr w ret consc lev, subs
ICD10DX	S06.6X5S	Traum subrac hem w LOC >24 hr w ret consc lev, sequela
ICD10DX	S06.6X6	Traum subrac hem w LOC >24 hr w/o ret consc w surv
ICD10DX	S06.6X6A	Traum subrac hem w LOC >24 hr w/o ret consc w surv, init

ICD10DX	S06.6X6D	Traum subrac hem w LOC >24 hr w/o ret consc w surv, subs
ICD10DX	S06.6X6S	Traum subrac hem w LOC >24 hr w/o ret consc w surv, sequela
ICD10DX	S06.6X7	Traum subrac hem w LOC w death due to brain injury bf consc
ICD10DX	S06.6X7A	Traum subrac hem w LOC w death d/t brain inj bf consc, init
ICD10DX	S06.6X8	Traum subrac hem w LOC w death due to oth cause bf consc
ICD10DX	S06.6X8A	Traum subrac hem w LOC w death d/t oth cause bf consc, init
ICD10DX	S06.6X9	Traum subrac hem w loss of consciousness of unsp duration
ICD10DX	S06.6X9A	Traum subrac hem w LOC of unsp duration, init
ICD10DX	S06.6X9D	Traum subrac hem w LOC of unsp duration, subs
ICD10DX	S06.6X9S	Traum subrac hem w LOC of unsp duration, sequela

## Retroperitoneal Bleeding

SOURCE	CODE	DESCRIPTION
ICD9DX	568.81	hemoperitoneum
ICD10DX	K66.1	Hemoperitoneum

## Non-critical Site Bleeding

SOURCE	CODE	DESCRIPTION
ICD9DX	280.0	chr blood loss anemia
ICD9DX	285.1	ac posthemorrhag anemia
ICD9DX	455.1	int thrombos hemorrhoid
ICD9DX	455.2	int hemrrhoid w comp nec
ICD9DX	455.4	ext thrombos hemorrhoid
ICD9DX	455.5	ext hemrrhoid w comp nec
ICD9DX	455.6	hemorrhoids nos
ICD9DX	455.7	thrombos hemorrhoids nos
ICD9DX	455.8	hemrrhoid nos w comp nec
ICD9DX	455.9	residual hemorrhoid tags
ICD9DX	456.0	esophag varices w bleed
ICD9DX	456.20	bleed esoph var oth dis
ICD9DX	459.0	hemorrhage nos
ICD9DX	530.1	esophagitis*
ICD9DX	530.10	esophagitis, unspecified
ICD9DX	530.11	reflux esophagitis
ICD9DX	530.12	acute esophagitis
ICD9DX	530.13	eosinophilic esophagitis
ICD9DX	530.19	other esophagitis
ICD9DX	530.7	mallory-weiss syndrome
ICD9DX	530.82	esophageal hemorrhage
ICD9DX	531.0	ac stomach ulcer w hem*
ICD9DX	531.00	ac stomach ulcer w hem
ICD9DX	531.01	ac stomach ulc w hem-obst
ICD9DX	531.1	ac stomach ulcer w perf*

ICD9DX	531.2	ac stomach ulc w hem/perf*
ICD9DX	531.20	ac stomach ulc w hem/perf
ICD9DX	531.21	ac stom ulc hem/perf-obs
ICD9DX	531.3	acute stomach ulcer nos*
ICD9DX	531.4	chr stomach ulc w hem*
ICD9DX	531.40	chr stomach ulc w hem
ICD9DX	531.41	chr stom ulc w hem-obstr
ICD9DX	531.5	chr stomach ulcer w perf*
ICD9DX	531.6	chr stomach ulc hem/perf*
ICD9DX	531.60	chr stomach ulc hem/perf
ICD9DX	531.61	chr stom ulc hem/perf-ob
ICD9DX	531.7	chr stomach ulcer nos*
ICD9DX	531.9	stomach ulcer nos*
ICD9DX	532.0	ac duodenal ulcer w hem*
ICD9DX	532.00	ac duodenal ulcer w hem
ICD9DX	532.01	ac duoden ulc w hem-obst
ICD9DX	532.1	ac duodenal ulcer w perf*
ICD9DX	532.2	ac duoden ulc w hem/perf*
ICD9DX	532.20	ac duoden ulc w hem/perf
ICD9DX	532.21	ac duod ulc hem/perf-obs
ICD9DX	532.3	acute duodenal ulcer nos*
ICD9DX	532.4	chr duoden ulcer w hem*
ICD9DX	532.40	chr duoden ulcer w hem
ICD9DX	532.41	chr duoden ulc hem-obstr
ICD9DX	532.5	chr duoden ulcer w perf*
ICD9DX	532.6	chr duoden ulc hem/perf*
ICD9DX	532.60	chr duoden ulc hem/perf
ICD9DX	532.61	chr duod ulc hem/perf-ob
ICD9DX	532.7	chr duodenal ulcer nos*
ICD9DX	532.9	duodenal ulcer nos*
ICD9DX	533.0	ac peptic ulcer w hemorrh*
ICD9DX	533.00	ac peptic ulcer w hemorrh
ICD9DX	533.01	ac peptic ulc w hem-obst
ICD9DX	533.1	ac peptic ulcer w perfor*
ICD9DX	533.2	ac peptic ulc w hem/perf*
ICD9DX	533.20	ac peptic ulc w hem/perf
ICD9DX	533.21	ac pept ulc hem/perf-obs
ICD9DX	533.3	acute peptic ulcer nos*
ICD9DX	533.4	chr peptic ulcer w hem*
ICD9DX	533.40	chr peptic ulcer w hem
ICD9DX	533.41	chr peptic ulc w hem-obs
ICD9DX	533.5	chr peptic ulcer w perf*
ICD9DX	533.6	chr pept ulc w hem/perf*
ICD9DX	533.60	chr pept ulc w hem/perf
ICD9DX	533.61	chr pept ulc hem/perf-ob

ICD9DX	533.7	chronic peptic ulcer nos*
ICD9DX	533.9	peptic ulcer nos*
ICD9DX	534.0	ac marginal ulcer w hem*
ICD9DX	534.00	ac marginal ulcer w hem
ICD9DX	534.01	ac margin ulc w hem-obst
ICD9DX	534.1	ac marginal ulcer w perf*
ICD9DX	534.2	ac margin ulc w hem/perf*
ICD9DX	534.20	ac margin ulc w hem/perf
ICD9DX	534.21	ac marg ulc hem/perf-obs
ICD9DX	534.3	ac marginal ulcer nos*
ICD9DX	534.4	chr marginal ulcer w hem*
ICD9DX	534.40	chr marginal ulcer w hem
ICD9DX	534.41	chr margin ulc w hem-obs
ICD9DX	534.5	chr marginal ulc w perf*
ICD9DX	534.6	chr margin ulc hem/perf*
ICD9DX	534.60	chr margin ulc hem/perf
ICD9DX	534.61	chr marg ulc hem/perf-ob
ICD9DX	534.7	chr marginal ulcer nos*
ICD9DX	534.9	gastrojejunal ulcer nos*
ICD9DX	535.00	acute gastritis w/o hmrhg
ICD9DX	535.01	acute gastritis w hmrhg
ICD9DX	535.10	atrph gastritis w/o hmrhg
ICD9DX	535.11	atrph gastritis w hmrhg
ICD9DX	535.20	gstr mcs1 hyprt w/o hmrg
ICD9DX	535.21	gstr mcs1 hyprt w hmrg
ICD9DX	535.30	alchl gastritis w/o hmrhg
ICD9DX	535.31	alchl gstritis w hmrhg
ICD9DX	535.40	oth spf gstrt w/o hmrhg
ICD9DX	535.41	oth spf gastrt w hmrhg
ICD9DX	535.50	gstr/ddnts nos w/o hmrhg
ICD9DX	535.51	gstr/ddnts nos w hmrhg
ICD9DX	535.60	duodenitis w/o hmrhg
ICD9DX	535.61	duodenitis w hmrhg
ICD9DX	537.83	angio stm/dudn w hmrhg
ICD9DX	562.00	dvrtclo sml int w/o hmrg
ICD9DX	562.01	dvrcli sml int w/o hmrg
ICD9DX	562.02	dvrtclo sml int w hmrhg
ICD9DX	562.03	dvrcli sml int w hmrhg
ICD9DX	562.10	dvrtclo colon w/o hmrhg
ICD9DX	562.11	dvrcli colon w/o hmrhg
ICD9DX	562.12	dvrcteo colon w hmrhg
ICD9DX	562.13	dvrcli colon w hmrhg
ICD9DX	569.3	rectal & anal hemorrhage
ICD9DX	569.85	angio intes w hmrhg
ICD9DX	578.0	hematemesis

ICD9DX	578.1	blood in stool
ICD9DX	578.9	gastrointest hemorrh nos
ICD9DX	593.81	renal vascular disorder
ICD9DX	599.70	hematuria nos
ICD9DX	599.71	gross hematuria
ICD9DX	623.6	vaginal hematoma
ICD9DX	623.8	noninflam dis vagina nec
ICD9DX	626.6	metrorrhagia
ICD9DX	626.8	menstrual disorder nec
ICD9DX	784.7	epistaxis
ICD9DX	784.8	hemorrhage from throat
ICD9DX	786.3	hemoptysis#
ICD9DX	786.30	hemoptysis nos
ICD9DX	786.31	ac idio pul hemrg infant
ICD9DX	786.39	hemoptysis nec
ICD10DX	D50.0	Iron deficiency anemia secondary to blood loss (chronic)
ICD10DX	D62	Acute posthemorrhagic anemia
ICD10DX	I85.01	Esophageal varices with bleeding
ICD10DX	I85.11	Secondary esophageal varices with bleeding
ICD10DX	K20	Esophagitis
ICD10DX	K20.0	Eosinophilic esophagitis
ICD10DX	K20.8	Other esophagitis
ICD10DX	K20.9	Esophagitis, unspecified
ICD10DX	K21.0	Gastro-esophageal reflux disease with esophagitis
ICD10DX	K22.11	Ulcer of esophagus with bleeding
ICD10DX	K22.6	Gastro-esophageal laceration-hemorrhage syndrome
ICD10DX	K25.0	Acute gastric ulcer with hemorrhage
ICD10DX	K25.1	Acute gastric ulcer with perforation
ICD10DX	K25.2	Acute gastric ulcer with both hemorrhage and perforation
ICD10DX	K25.4	Chronic or unspecified gastric ulcer with hemorrhage
ICD10DX	K25.5	Chronic or unspecified gastric ulcer with perforation
ICD10DX	K25.6	Chronic or unsp gastric ulcer w both hemorrhage and perf
ICD10DX	K26.0	Acute duodenal ulcer with hemorrhage
ICD10DX	K26.1	Acute duodenal ulcer with perforation
ICD10DX	K26.2	Acute duodenal ulcer with both hemorrhage and perforation
ICD10DX	K26.4	Chronic or unspecified duodenal ulcer with hemorrhage
ICD10DX	K26.5	Chronic or unspecified duodenal ulcer with perforation
ICD10DX	K26.6	Chronic or unsp duodenal ulcer w both hemorrhage and perf
ICD10DX	K27.0	Acute peptic ulcer, site unspecified, with hemorrhage
ICD10DX	K27.1	Acute peptic ulcer, site unspecified, with perforation
ICD10DX	K27.2	Acute peptic ulcer, site unsp, w both hemorrhage and perf
ICD10DX	K27.4	Chronic or unsp peptic ulcer, site unsp, with hemorrhage
ICD10DX	K27.5	Chronic or unsp peptic ulcer, site unsp, with perforation
ICD10DX	K27.6	Chr or unsp peptic ulcer, site unsp, w both hemor and perf
ICD10DX	K28.0	Acute gastrojejunal ulcer with hemorrhage

ICD10DX	K28.1	Acute gastrojejunal ulcer with perforation
ICD10DX	K28.2	Acute gastrojejunal ulcer w both hemorrhage and perforation
ICD10DX	K28.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage
ICD10DX	K28.5	Chronic or unspecified gastrojejunal ulcer with perforation
ICD10DX	K28.6	Chronic or unsp gastrojejunal ulcer w both hemor and perf
ICD10DX	K29.01	Acute gastritis with bleeding
ICD10DX	K29.21	Alcoholic gastritis with bleeding
ICD10DX	K29.31	Chronic superficial gastritis with bleeding
ICD10DX	K29.41	Chronic atrophic gastritis with bleeding
ICD10DX	K29.51	Unspecified chronic gastritis with bleeding
ICD10DX	K29.61	Other gastritis with bleeding
ICD10DX	K29.71	Gastritis, unspecified, with bleeding
ICD10DX	K29.81	Duodenitis with bleeding
ICD10DX	K29.91	Gastroduodenitis, unspecified, with bleeding
ICD10DX	K31.811	Angiodysplasia of stomach and duodenum with bleeding
ICD10DX	K55.21	Angiodysplasia of colon with hemorrhage
ICD10DX	K57.01	Dvtreli of sm int w perforation and abscess w bleeding
ICD10DX	K57.11	Dvrtclos of sm int w/o perforation or abscess w bleeding
ICD10DX	K57.21	Dvtreli of lg int w perforation and abscess w bleeding
ICD10DX	K57.31	Dvrtclos of lg int w/o perforation or abscess w bleeding
ICD10DX	K57.41	Dvtreli of both small and lg int w perf and abscess w bleed
ICD10DX	K57.51	Dvrtclos of both small and lg int w/o perf or abscess w bleed
ICD10DX	K57.53	Dvtreli of both small and lg int w/o perf or abscess w bleed
ICD10DX	K57.81	Dvtreli of intest, part unsp, w perf and abscess w bleeding
ICD10DX	K57.91	Dvrtclos of intest, part unsp, w/o perf or abscess w bleed
ICD10DX	K57.93	Dvtreli of intest, part unsp, w/o perf or abscess w bleeding
ICD10DX	K62.5	Hemorrhage of anus and rectum
ICD10DX	K64.0	First degree hemorrhoids
ICD10DX	K64.1	Second degree hemorrhoids
ICD10DX	K64.2	Third degree hemorrhoids
ICD10DX	K64.3	Fourth degree hemorrhoids
ICD10DX	K64.4	Residual hemorrhoidal skin tags
ICD10DX	K64.5	Perianal venous thrombosis
ICD10DX	K64.8	Other hemorrhoids
ICD10DX	K64.9	Unspecified hemorrhoids
ICD10DX	K92.0	Hematemesis
ICD10DX	K92.1	Melena
ICD10DX	K92.2	Gastrointestinal hemorrhage, unspecified
ICD10DX	N89.7	Hematocolpos
ICD10DX	N89.8	Other specified noninflammatory disorders of vagina
ICD10DX	N92.1	Excessive and frequent menstruation with irregular cycle
ICD10DX	N93.8	Other specified abnormal uterine and vaginal bleeding
ICD10DX	N93.9	Abnormal uterine and vaginal bleeding, unspecified
ICD10DX	R04.0	Epistaxis
ICD10DX	R04.1	Hemorrhage from throat

ICD10DX	R04.2	Hemoptysis
ICD10DX	R31.0	Gross hematuria
ICD10DX	R31.9	Hematuria, unspecified
ICD10DX	R58	Hemorrhage, not elsewhere classified

## GI Bleeding

SOURCE	CODE	DESCRIPTION
ICD9DX	456.0	esophag varices w bleed
ICD9DX	456.20	bleed esoph var oth dis
ICD9DX	530.1	esophagitis*
ICD9DX	530.10	esophagitis, unspecified
ICD9DX	530.11	reflux esophagitis
ICD9DX	530.12	acute esophagitis
ICD9DX	530.13	eosinophilic esophagitis
ICD9DX	530.19	other esophagitis
ICD9DX	530.7	mallory-weiss syndrome
ICD9DX	530.82	esophageal hemorrhage
ICD9DX	531.0	ac stomach ulcer w hem*
ICD9DX	531.00	ac stomach ulcer w hem
ICD9DX	531.01	ac stomach ulc w hem-obst
ICD9DX	531.1	ac stomach ulcer w perf*
ICD9DX	531.2	ac stomach ulc w hem/perf*
ICD9DX	531.20	ac stomach ulc w hem/perf
ICD9DX	531.21	ac stom ulc hem/perf-obs
ICD9DX	531.3	acute stomach ulcer nos*
ICD9DX	531.4	chr stomach ulc w hem*
ICD9DX	531.40	chr stomach ulc w hem
ICD9DX	531.41	chr stom ulc w hem-obstr
ICD9DX	531.5	chr stomach ulcer w perf*
ICD9DX	531.6	chr stomach ulc hem/perf*
ICD9DX	531.60	chr stomach ulc hem/perf
ICD9DX	531.61	chr stom ulc hem/perf-ob
ICD9DX	531.7	chr stomach ulcer nos*
ICD9DX	531.9	stomach ulcer nos*
ICD9DX	532.0	ac duodenal ulcer w hem*
ICD9DX	532.00	ac duodenal ulcer w hem
ICD9DX	532.01	ac duoden ulc w hem-obst
ICD9DX	532.1	ac duodenal ulcer w perf*
ICD9DX	532.2	ac duoden ulc w hem/perf*
ICD9DX	532.20	ac duoden ulc w hem/perf
ICD9DX	532.21	ac duod ulc hem/perf-obs
ICD9DX	532.3	acute duodenal ulcer nos*
ICD9DX	532.4	chr duoden ulcer w hem*
ICD9DX	532.40	chr duoden ulcer w hem

ICD9DX	532.41	chr duoden ulc hem-obstr
ICD9DX	532.5	chr duoden ulcer w perf*
ICD9DX	532.6	chr duoden ulc hem/perf*
ICD9DX	532.60	chr duoden ulc hem/perf
ICD9DX	532.61	chr duod ulc hem/perf-ob
ICD9DX	532.7	chr duodenal ulcer nos*
ICD9DX	532.9	duodenal ulcer nos*
ICD9DX	533.0	ac peptic ulcer w hemorrh*
ICD9DX	533.00	ac peptic ulcer w hemorrh
ICD9DX	533.01	ac peptic ulc w hem-obst
ICD9DX	533.1	ac peptic ulcer w perfor*
ICD9DX	533.2	ac peptic ulc w hem/perf*
ICD9DX	533.20	ac peptic ulc w hem/perf
ICD9DX	533.21	ac pept ulc hem/perf-obs
ICD9DX	533.3	acute peptic ulcer nos*
ICD9DX	533.4	chr peptic ulcer w hem*
ICD9DX	533.40	chr peptic ulcer w hem
ICD9DX	533.41	chr peptic ulc w hem-obs
ICD9DX	533.5	chr peptic ulcer w perf*
ICD9DX	533.6	chr pept ulc w hem/perf*
ICD9DX	533.60	chr pept ulc w hem/perf
ICD9DX	533.61	chr pept ulc hem/perf-ob
ICD9DX	533.7	chronic peptic ulcer nos*
ICD9DX	533.9	peptic ulcer nos*
ICD9DX	534.0	ac marginal ulcer w hem*
ICD9DX	534.00	ac marginal ulcer w hem
ICD9DX	534.01	ac margin ulc w hem-obst
ICD9DX	534.1	ac marginal ulcer w perf*
ICD9DX	534.2	ac margin ulc w hem/perf*
ICD9DX	534.20	ac margin ulc w hem/perf
ICD9DX	534.21	ac marg ulc hem/perf-obs
ICD9DX	534.3	ac marginal ulcer nos*
ICD9DX	534.4	chr marginal ulcer w hem*
ICD9DX	534.40	chr marginal ulcer w hem
ICD9DX	534.41	chr margin ulc w hem-obs
ICD9DX	534.5	chr marginal ulc w perf*
ICD9DX	534.6	chr margin ulc hem/perf*
ICD9DX	534.60	chr margin ulc hem/perf
ICD9DX	534.61	chr marg ulc hem/perf-ob
ICD9DX	534.7	chr marginal ulcer nos*
ICD9DX	534.9	gastrojejunal ulcer nos*
ICD9DX	535.00	acute gastritis w/o hmrhg
ICD9DX	535.01	acute gastritis w hmrhg
ICD9DX	535.10	atrph gastritis w/o hmrhg
ICD9DX	535.11	atrph gastritis w hmrhg

ICD9DX	535.20	gstr mcls hyprt w/o hmrhg
ICD9DX	535.21	gstr mcls hyprt w hmrhg
ICD9DX	535.30	alchl gastritis w/o hmrhg
ICD9DX	535.31	alchl gstritis w hmrhg
ICD9DX	535.40	oth spf gstrt w/o hmrhg
ICD9DX	535.41	oth spf gastrt w hmrhg
ICD9DX	535.50	gstr/ddnts nos w/o hmrhg
ICD9DX	535.51	gstr/ddnts nos w hmrhg
ICD9DX	535.60	duodenitis w/o hmrhg
ICD9DX	535.61	duodenitis w hmrhg
ICD9DX	537.83	angio stm/dudn w hmrhg
ICD9DX	578.0	hematemesis
ICD10DX	I85.01	Esophageal varices with bleeding
ICD10DX	I85.11	Secondary esophageal varices with bleeding
ICD10DX	K20	Esophagitis
ICD10DX	K20.0	Eosinophilic esophagitis
ICD10DX	K20.8	Other esophagitis
ICD10DX	K20.9	Esophagitis, unspecified
ICD10DX	K21.0	Gastro-esophageal reflux disease with esophagitis
ICD10DX	K22.11	Ulcer of esophagus with bleeding
ICD10DX	K22.6	Gastro-esophageal laceration-hemorrhage syndrome
ICD10DX	K25.0	Acute gastric ulcer with hemorrhage
ICD10DX	K25.1	Acute gastric ulcer with perforation
ICD10DX	K25.2	Acute gastric ulcer with both hemorrhage and perforation
ICD10DX	K25.4	Chronic or unspecified gastric ulcer with hemorrhage
ICD10DX	K25.5	Chronic or unspecified gastric ulcer with perforation
ICD10DX	K25.6	Chronic or unsp gastric ulcer w both hemorrhage and perf
ICD10DX	K26.0	Acute duodenal ulcer with hemorrhage
ICD10DX	K26.1	Acute duodenal ulcer with perforation
ICD10DX	K26.2	Acute duodenal ulcer with both hemorrhage and perforation
ICD10DX	K26.4	Chronic or unspecified duodenal ulcer with hemorrhage
ICD10DX	K26.5	Chronic or unspecified duodenal ulcer with perforation
ICD10DX	K26.6	Chronic or unsp duodenal ulcer w both hemorrhage and perf
ICD10DX	K27.0	Acute peptic ulcer, site unspecified, with hemorrhage
ICD10DX	K27.1	Acute peptic ulcer, site unspecified, with perforation
ICD10DX	K27.2	Acute peptic ulcer, site unsp, w both hemorrhage and perf
ICD10DX	K27.4	Chronic or unsp peptic ulcer, site unsp, with hemorrhage
ICD10DX	K27.5	Chronic or unsp peptic ulcer, site unsp, with perforation
ICD10DX	K27.6	Chr or unsp peptic ulcer, site unsp, w both hemor and perf
ICD10DX	K28.0	Acute gastrojejunal ulcer with hemorrhage
ICD10DX	K28.1	Acute gastrojejunal ulcer with perforation
ICD10DX	K28.2	Acute gastrojejunal ulcer w both hemorrhage and perforation
ICD10DX	K28.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage
ICD10DX	K28.5	Chronic or unspecified gastrojejunal ulcer with perforation
ICD10DX	K28.6	Chronic or unsp gastrojejunal ulcer w both hemor and perf

ICD10DX	K29.01	Acute gastritis with bleeding
ICD10DX	K29.21	Alcoholic gastritis with bleeding
ICD10DX	K29.31	Chronic superficial gastritis with bleeding
ICD10DX	K29.41	Chronic atrophic gastritis with bleeding
ICD10DX	K29.51	Unspecified chronic gastritis with bleeding
ICD10DX	K29.61	Other gastritis with bleeding
ICD10DX	K29.71	Gastritis, unspecified, with bleeding
ICD10DX	K29.81	Duodenitis with bleeding
ICD10DX	K29.91	Gastroduodenitis, unspecified, with bleeding
ICD10DX	K31.811	Angiodysplasia of stomach and duodenum with bleeding
ICD10DX	K92.0	Hematemesis
ICD9DX	455.1	int thrombos hemorrhoid
ICD9DX	455.2	int hemrrhoid w comp nec
ICD9DX	455.4	ext thrombos hemorrhoid
ICD9DX	455.5	ext hemrrhoid w comp nec
ICD9DX	455.6	hemorrhoids nos
ICD9DX	455.7	thrombos hemorrhoids nos
ICD9DX	455.8	hemrrhoid nos w comp nec
ICD9DX	455.9	residual hemorrhoid tags
ICD9DX	562.00	dvrclclo sml int w/o hmrg
ICD9DX	562.01	dvrclcli sml int w/o hmrg
ICD9DX	562.02	dvrclclo sml int w hmrg
ICD9DX	562.03	dvrclcli sml int w hmrg
ICD9DX	562.10	dvrclclo colon w/o hmrg
ICD9DX	562.11	dvrclcli colon w/o hmrg
ICD9DX	562.12	dvrclclo colon w hmrg
ICD9DX	562.13	dvrclcli colon w hmrg
ICD9DX	569.3	rectal & anal hemorrhage
ICD9DX	569.85	angio intes w hmrg
ICD10DX	K55.21	Angiodysplasia of colon with hemorrhage
ICD10DX	K57.01	Dvtreli of sm int w perforation and abscess w bleeding
ICD10DX	K57.11	Dvrtclos of sm int w/o perforation or abscess w bleeding
ICD10DX	K57.21	Dvtreli of lg int w perforation and abscess w bleeding
ICD10DX	K57.31	Dvrtclos of lg int w/o perforation or abscess w bleeding
ICD10DX	K57.41	Dvtreli of both small and lg int w perf and abscess w bleed
ICD10DX	K57.51	Dvrtclos of both small and lg int w/o perf or abscess w bleed
ICD10DX	K57.53	Dvtreli of both small and lg int w/o perf or abscess w bleed
ICD10DX	K57.81	Dvtreli of intest, part unsp, w perf and abscess w bleeding
ICD10DX	K57.91	Dvrtclos of intest, part unsp, w/o perf or abscess w bleed
ICD10DX	K57.93	Dvtreli of intest, part unsp, w/o perf or abscess w bleeding
ICD10DX	K62.5	Hemorrhage of anus and rectum
ICD10DX	K64.0	First degree hemorrhoids
ICD10DX	K64.1	Second degree hemorrhoids
ICD10DX	K64.2	Third degree hemorrhoids
ICD10DX	K64.3	Fourth degree hemorrhoids

ICD10DX	K64.4	Residual hemorrhoidal skin tags
ICD10DX	K64.5	Perianal venous thrombosis
ICD10DX	K64.8	Other hemorrhoids
ICD10DX	K64.9	Unspecified hemorrhoids
ICD9DX	578.1	blood in stool
ICD9DX	578.9	gastrointest hemorrh nos
ICD10DX	K92.1	Melena
ICD10DX	K92.2	Gastrointestinal hemorrhage, unspecified

## Transfusion

SOURCE	CODE	DESCRIPTION
ICD9PX	99.03	OTHER TRANSFUSION OF WHOLE BLOOD
ICD9PX	99.04	TRANSFUSION OF PACKED CELLS
ICD9PX	99.05	TRANSFUSION OF PLATELETS
ICD9PX	99.06	TRANSFUSION OF COAGULATION FACTORS
ICD10PX	30230H1	Transfusion of Nonautologous Whole Blood into Peripheral Vein, Open Approach
ICD10PX	30230K1	Transfusion of Nonautologous Frozen Plasma into Peripheral Vein, Open Approach
ICD10PX	30230L1	Transfusion of Nonautologous Fresh Plasma into Peripheral Vein, Open Approach
ICD10PX	30230M1	Transfusion of Nonautologous Plasma Cryoprecipitate into Peripheral Vein, Open Approach
ICD10PX	30230N1	Transfusion of Nonautologous Red Blood Cells into Peripheral Vein, Open Approach
ICD10PX	30230P1	Transfusion of Nonautologous Frozen Red Cells into Peripheral Vein, Open Approach
ICD10PX	30230R1	Transfusion of Nonautologous Platelets into Peripheral Vein, Open Approach
ICD10PX	30230T1	Transfusion of Nonautologous Fibrinogen into Peripheral Vein, Open Approach
ICD10PX	30230V1	Transfusion of Nonautologous Antihemophilic Factors into Peripheral Vein, Open Approach
ICD10PX	30230W1	Transfusion of Nonautologous Factor IX into Peripheral Vein, Open Approach
ICD10PX	30233H1	Transfusion of Nonautologous Whole Blood into Peripheral Vein, Percutaneous Approach
ICD10PX	30233K1	Transfusion of Nonautologous Frozen Plasma into Peripheral Vein, Percutaneous Approach
ICD10PX	30233L1	Transfusion of Nonautologous Fresh Plasma into Peripheral Vein, Percutaneous Approach
ICD10PX	30233M1	Transfusion of Nonautologous Plasma Cryoprecipitate into Peripheral Vein, Percutaneous Approach
ICD10PX	30233N1	Transfusion of Nonautologous Red Blood Cells into Peripheral Vein, Percutaneous Approach
ICD10PX	30233P1	Transfusion of Nonautologous Frozen Red Cells into Peripheral Vein, Percutaneous Approach
ICD10PX	30233R1	Transfusion of Nonautologous Platelets into Peripheral Vein, Percutaneous Approach
ICD10PX	30233T1	Transfusion of Nonautologous Fibrinogen into Peripheral Vein, Percutaneous Approach
ICD10PX	30233V1	Transfusion of Nonautologous Antihemophilic Factors into Peripheral Vein, Percutaneous Approach
ICD10PX	30233W1	Transfusion of Nonautologous Factor IX into Peripheral Vein, Percutaneous Approach
ICD10PX	30240H1	Transfusion of Nonautologous Whole Blood into Central Vein, Open Approach
ICD10PX	30240K1	Transfusion of Nonautologous Frozen Plasma into Central Vein, Open Approach
ICD10PX	30240L1	Transfusion of Nonautologous Fresh Plasma into Central Vein, Open Approach
ICD10PX	30240M1	Transfusion of Nonautologous Plasma Cryoprecipitate into Central Vein, Open Approach
ICD10PX	30240N1	Transfusion of Nonautologous Red Blood Cells into Central Vein, Open Approach
ICD10PX	30240P1	Transfusion of Nonautologous Frozen Red Cells into Central Vein, Open Approach
ICD10PX	30240R1	Transfusion of Nonautologous Platelets into Central Vein, Open Approach
ICD10PX	30240T1	Transfusion of Nonautologous Fibrinogen into Central Vein, Open Approach

ICD10PX	30240V1	Transfusion of Nonautologous Antihemophilic Factors into Central Vein, Open Approach
ICD10PX	30240W1	Transfusion of Nonautologous Factor IX into Central Vein, Open Approach
ICD10PX	30243H1	Transfusion of Nonautologous Whole Blood into Central Vein, Percutaneous Approach
ICD10PX	30243K1	Transfusion of Nonautologous Frozen Plasma into Central Vein, Percutaneous Approach
ICD10PX	30243L1	Transfusion of Nonautologous Fresh Plasma into Central Vein, Percutaneous Approach
ICD10PX	30243M1	Transfusion of Nonautologous Plasma Cryoprecipitate into Central Vein, Percutaneous Approach
ICD10PX	30243N1	Transfusion of Nonautologous Red Blood Cells into Central Vein, Percutaneous Approach
ICD10PX	30243P1	Transfusion of Nonautologous Frozen Red Cells into Central Vein, Percutaneous Approach
ICD10PX	30243R1	Transfusion of Nonautologous Platelets into Central Vein, Percutaneous Approach
ICD10PX	30243T1	Transfusion of Nonautologous Fibrinogen into Central Vein, Percutaneous Approach
ICD10PX	30243V1	Transfusion of Nonautologous Antihemophilic Factors into Central Vein, Percutaneous Approach
ICD10PX	30243W1	Transfusion of Nonautologous Factor IX into Central Vein, Percutaneous Approach
HCPCS	P9010	BLOOD (WHOLE), FOR TRANSFUSION, PER UNIT
HCPCS	P9011	BLOOD (SPLIT UNIT), SPECIFY AMOUNT / BLOOD, SPLIT UNIT
HCPCS	P9016	RED BLOOD CELLS, LEUKOCYTES REDUCED, EACH UNIT
HCPCS	P9017	FRESH FROZEN PLASMA (SINGLE DONOR), EACH UNIT / FRESH FROZEN PLASMA (SINGLE DONOR), FROZEN WITHIN 8 HOURS OF COLLECTION, EACH UNIT
HCPCS	P9019	PLATELETS, EACH UNIT
HCPCS	P9020	PLATELET RICH PLASMA, EACH UNIT
HCPCS	P9021	RED BLOOD CELLS, EACH UNIT
HCPCS	P9022	RED BLOOD CELLS, WASHED, EACH UNIT
HCPCS	P9023	PLASMA, POOLED MULTIPLE DONOR, SOLVENT/DETERGENT TREATED, FROZEN, EACH UNIT
HCPCS	P9031	PLATELETS, LEUKOCYTES REDUCED, EACH UNIT
HCPCS	P9032	PLATELETS, IRRADIATED, EACH UNIT
HCPCS	P9033	PLATELETS, LEUKOCYTES REDUCED, IRRADIATED, EACH UNIT
HCPCS	P9034	PLATELETS, PHERESIS, EACH UNIT
HCPCS	P9035	PLATELETS, PHERESIS, LEUKOCYTES REDUCED, EACH UNIT
HCPCS	P9036	PLATELETS, PHERESIS, IRRADIATED, EACH UNIT
HCPCS	P9037	PLATELETS, PHERESIS, LEUKOCYTES REDUCED, IRRADIATED, EACH UNIT
HCPCS	P9038	RED BLOOD CELLS, IRRADIATED, EACH UNIT
HCPCS	P9039	RED BLOOD CELLS, DEGLYCEROLIZED, EACH UNIT
HCPCS	P9040	RED BLOOD CELLS, LEUKOCYTES REDUCED, IRRADIATED, EACH UNIT
HCPCS	P9044	PLASMA, CRYOPRECIPITATE REDUCED, EACH UNIT
HCPCS	P9051	WHOLE BLOOD OR RED BLOOD CELLS, LEUKOCYTES REDUCED, CMV
HCPCS	P9052	PLATELETS, HLA-NEGATIVE, EACH UNIT-MATCHED LEUKOCYTES REDUCED, APHERESIS/PHERESIS, EACH UNIT
HCPCS	P9053	PLATELETS, PHERESIS, LEUKOCYTES REDUCED, CMV-NEGATIVE, IRRADIATED, EACH UNIT
HCPCS	P9054	WHOLE BLOOD OR RED BLOOD CELLS, LEUKOCYTES REDUCED, FROZEN, DEGLYCEROL, WASHED, EACH UNIT
HCPCS	P9055	PLATELETS, LEUKOCYTES REDUCED, CMV-NEGATIVE, APHERESIS/PHERESIS, EACH UNIT
HCPCS	P9056	WHOLE BLOOD, LEUKOCYTES REDUCED, IRRADIATED, EACH UNIT
HCPCS	P9057	RED BLOOD CELLS, FROZEN/DEGLYCEROLIZED/WASHED, LEUKOCYTES REDUCED, IRRADIATED, EACH UNIT
HCPCS	P9058	RED BLOOD CELLS, LEUKOCYTES REDUCED, CMV-NEGATIVE, IRRADIATED, EACH UNIT
HCPCS	P9059	FRESH FROZEN PLASMA BETWEEN 8-24 HOURS OF COLLECTION, EACH UNIT

HCPCS	P9060	FRESH FROZEN PLASMA, DONOR RETESTED, EACH UNIT
HCPCS	P9070	Plasma, pooled multiple donor, pathogen reduced, frozen, each unit
HCPCS	P9071	Plasma (single donor), pathogen reduced, frozen, each unit
REV CTR CD	0381	Blood-packed red cells
REV CTR CD	0382	Blood-whole blood
REV CTR CD	0383	Blood-plasma
REV CTR CD	0384	Blood-platelets
REV CTR CD	0387	Blood-other derivatives (cryoprecipitates)
REV CTR CD	0391	Blood administration-transfusion