



**AHRQ Quality Indicators™ (AHRQ QI™)
ICD-9-CM and ICD-10-CM/PCS
Specification Enhanced Version 5.0**

Patient Safety Indicators #10 (PSI #10)
Postoperative Physiologic and Metabolic
Derangement Rate

**October 2015
Provider-Level Indicator
Type of Score: Rate**

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PSI #10 Postoperative Physiologic and Metabolic Derangement Rate

DESCRIPTION

Postoperative acute renal failure (secondary diagnosis) with dialysis per 1,000 elective surgical discharges for patients ages 18 years and older. Excludes cases with principal diagnosis for acute renal failure; cases with secondary diagnosis for acute renal failure present on admission; cases with secondary diagnosis of acute renal failure and dialysis before or on the same day as the first operating room procedure; cases with acute renal failure and acute myocardial infarction, cardiac arrhythmia, cardiac arrest, shock, hemorrhage, gastrointestinal hemorrhage or chronic renal failure; and obstetric cases.

[NOTE: The software provides the rate per hospital discharge. However, common practice reports the measure as per 1,000 discharges. The user must multiply the rate obtained from the software by 1,000 to report events per 1,000 hospital discharges.]

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NUMERATOR

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with either: • any secondary ICD-9-CM or ICD-10-CM diagnosis codes for acute renal failure and any-listed ICD-9- CM or ICD-10-PCS procedure codes for dialysis
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Acute renal failure diagnosis codes: (PHYSIDB)

ICD-9-CM	Description	ICD-10-CM	Description
5845	AC KIDNY FAIL, TUBR NECR	N170	Acute kidney failure with tubular necrosis
5846	AC KIDNY FAIL, CORT NECR	N171	Acute kidney failure with acute cortical necrosis
5847	AC KIDNY FAIL, MEDU NECR	N172	Acute kidney failure with medullary necrosis
5848	ACUTE KIDNEY FAILURE NEC	N178	Other acute kidney failure
5849	ACUTE KIDNEY FAILURE NOS	N179	Acute kidney failure, unspecified
586	RENAL FAILURE NOS	N19	Unspecified kidney failure
9975	SURG COMPL-URINARY TRACT	N990	Postprocedural (acute) (chronic) kidney failure

Dialysis procedure codes: (DIALYIP)
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ICD-9-CM	Description	ICD-10-PCS	Description
3995	HEMODIALYSIS	3E1M39Z	Irrigation of Peritoneal Cavity using Dialysate, Percutaneous Approach
5498	PERITONEAL DIALYSIS	5A1D00Z	Performance of Urinary Filtration, Single
		5A1D60Z	Performance of Urinary Filtration, Multiple

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NUMERATOR EXCLUSIONS
<i>Not Applicable</i>

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DENOMINATOR

Elective surgical discharges, for patients ages 18 years and older, with any-listed ICD-9-CM or ICD-10-PCS procedure codes for an operating room procedure. Elective surgical discharges are defined by specific DRG or MS-DRG codes with admission type recorded as elective (SID ATYPE=3).

[Appendix A - Operating Room Procedure Codes](#)

[Appendix D - Surgical Discharge DRGs \(for discharges prior to October 1, 2007\)](#)

[Appendix E - Surgical Discharge MS-DRGs \(for discharges on or after October 1, 2007\)](#)

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DENOMINATOR EXCLUSIONS

Exclude cases:

- with a principal ICD-9-CM or ICD-10-CM diagnosis code (or secondary diagnosis present on admission¹) for acute renal failure (see above)
- with any dialysis procedure (see above) occurs before or on the same day as the first operating room procedure
- with a principal ICD-9-CM or ICD-10-CM diagnosis code for (or secondary diagnosis present on admission) acute myocardial infarction
- with a principal ICD-9-CM or ICD-10-CM diagnosis code for (or secondary diagnosis present on admission) cardiac arrhythmia
- with a principal ICD-9-CM or ICD-10-CM diagnosis code (or secondary diagnosis present on admission) for cardiac arrest
- with a principal ICD-9-CM or ICD-10-CM diagnosis code (or secondary diagnosis present on admission) for shock
- with any a principal ICD-9-CM or ICD-10-CM diagnosis code (or secondary diagnosis present on admission) for hemorrhage
- with any secondary ICD-9-CM or ICD-10-CM diagnosis codes for acute renal failure (see above) and a principal ICD-9-CM or ICD-10-CM diagnosis code (or secondary diagnosis present on admission) for gastrointestinal hemorrhage
- with any secondary ICD-9-CM or ICD-10-CM diagnosis codes for acute renal failure (see above) and a principal ICD-9-CM or ICD-10-CM diagnosis code (or secondary diagnosis present on admission) for chronic renal failure
- MDC 14 (pregnancy, childbirth and the puerperium)
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing)

¹. Only for cases that otherwise qualify for the numerator

². If day of procedure is not available in the input data file, the rate may be slightly lower than if the information was available

Acute myocardial infarction diagnosis codes: (AMIID)

ICD-9-CM	Description	ICD-10-CM	Description
41000	AMI OF ANTEROLATERAL WALL - EPISODE OF CARE UNSPECIFIED	I2101	ST elevation (STEMI) myocardial infarction involving left main coronary artery
41001	AMI OF ANTEROLATERAL WALL - INITIAL EPISODE OF CARE	I2102	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery
41010	AMI OF OTHER ANTERIOR WALL - EPISODE OF CARE UNSPECIFIED	I2109	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall

41011	AMI OF OTHER ANTERIOR WALL - INITIAL EPISODE OF CARE	I2111	ST elevation (STEMI) myocardial infarction involving right coronary artery
41020	AMI OF INFEROLATERAL WALL - EPISODE OF CARE UNSPECIFIED	I2119	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall
41021	AMI OF INFEROLATERAL WALL - INITIAL EPISODE OF CARE	I2121	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery
41030	AMI OF INFEROPOSTERIOR WALL - EPISODE OF CARE UNSPECIFIED	I2129	ST elevation (STEMI) myocardial infarction involving other sites
41031	AMI OF INFEROPOSTERIOR WALL - INITIAL EPISODE OF CARE	I213	ST elevation (STEMI) myocardial infarction of unspecified site
41040	AMI OF INFERIOR WALL - EPISODE OF CARE UNSPECIFIED	I214	Non-ST elevation (NSTEMI) myocardial infarction
41041	AMI OF INFERIOR WALL - INITIAL EPISODE OF CARE	I220	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall
41050	AMI OF OTHER LATERAL WALL - EPISODE OF CARE UNSPECIFIED	I221	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall
41051	AMI OF OTHER LATERAL WALL - INITIAL EPISODE OF CARE	I222	Subsequent non-ST elevation (NSTEMI) myocardial infarction
41060	AMI TRUE POSTERIOR WALL INFARCTION - EPISODE OF CARE UNSPECIFIED	I228	Subsequent ST elevation (STEMI) myocardial infarction of other sites
41061	AMI TRUE POSTERIOR WALL INFARCTION - INITIAL EPISODE OF CARE	I229	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site
41070	AMI SUBENDOCARDIAL INFARCTION - EPISODE OF CARE		
41071	AMI SUBENDOCARDIAL INFARCTION - INITIAL EPISODE OF CARE		
41080	AMI OF OTHER SPECIFIED SITES - EPISODE OF CARE UNSPECIFIED		
41081	AMI OF OTHER SPECIFIED SITES - INITIAL EPISODE OF CARE		
41090	AMI UNSPECIFIED SITE - EPISODE OF CARE UNSPECIFIED		
41091	AMI UNSPECIFIED SITE - INITIAL EPISODE OF CARE		

Cardiac arrhythmia diagnosis codes: (CARDRID)			
ICD-9-CM	Description	ICD-10-CM	Description
4260	ATRIOVENTRICULAR BLOCK, COMPLETE	I442	Atrioventricular block, complete
4270	PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA	I470	Re-entry ventricular arrhythmia
4271	PAROSYSMAL VENTRICULAR TACHYCARDIA	I471	Supraventricular tachycardia
4272	PAROXYSMAL TACHYCARDIA, UNSPECIFIED	I472	Ventricular tachycardia
42731	ATRIAL FIBRILLATION	I479	Paroxysmal tachycardia, unspecified
42732	ATRIAL FLUTTER	I480	Paroxysmal atrial fibrillation
42741	VENTRICULAR FIBRILLATION	I481	Persistent atrial fibrillation
42742	VENTRICULAR FLUTTER	I482	Chronic atrial fibrillation
4279	CARDIAC DYSRHYTHMIA	I483	Typical atrial flutter
		I484	Atypical atrial flutter
		I4891	Unspecified atrial fibrillation
		I4892	Unspecified atrial flutter
		I4901	Ventricular fibrillation
		I4902	Ventricular flutter
		I492	Junctional premature depolarization
		I499	Cardiac arrhythmia, unspecified

Cardiac arrest diagnosis codes: (CARDIID)			
ICD-9-CM	Description	ICD-10-CM	Description
4275	CARDIAC ARREST	I462	Cardiac arrest due to underlying cardiac condition
		I468	Cardiac arrest due to other underlying condition
		I469	Cardiac arrest, cause unspecified

Shock diagnosis codes: (SHOCKID)			
ICD-9-CM	Description	ICD-10-CM	Description
63450	SPON ABORT W SHOCK-UNSP	00331	Shock following incomplete spontaneous abortion

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63451	SPON ABORT W SHOCK-INC	00381	Shock following complete or unspecified spontaneous abortion
63452	SPON ABORT W SHOCK-COMP	00481	Shock following (induced) termination of pregnancy
63550	LEGAL ABORT W SHOCK-UNSP	00731	Shock following failed attempted termination of pregnancy
63551	LEGAL ABORT W SHOCK-INC	0083	Shock following ectopic and molar pregnancy
63552	LEGAL ABORT W SHOCK-COMP	0751	Shock during or following labor and delivery
63650	ILLEG ABORT W SHOCK-UNSP	R570	Cardiogenic shock
63651	ILLEG ABORT W SHOCK-INC	R571	Hypovolemic shock
63652	ILLEG ABORT W SHOCK-COMP	R578	Other shock
63750	ABORT NOS W SHOCK-UNSP	R579	Shock, unspecified
63751	ABORT NOS W SHOCK-INC	R6521	Severe sepsis with septic shock
63752	ABORT NOS W SHOCK-COMP	T782XXA	Anaphylactic shock, unspecified, initial encounter
6385	ATTEM ABORTION W SHOCK	T8051XA	Anaphylactic reaction due to administration of blood and blood products, initial encounter
6395	COMPLICATIONS FOLLOWING ABORTION AND ECTOPIC AND MOLAR PREGNANCIES, SHOCK	T8052XA	Anaphylactic reaction due to vaccination, initial encounter
66910	SHOCK DURING OR FOLLOWING LABOR AND DELIVERY	T8059XA	Anaphylactic reaction due to other serum, initial encounter
66911	SHOCK DURING OR FOLLOWING LABOR AND DELIVERY	T8110XA	Postprocedural shock unspecified, initial encounter
66912	SHOCK DURING OR FOLLOWING LABOR AND DELIVERY	T8111XA	Postprocedural cardiogenic shock, initial encounter
66913	SHOCK DURING OR FOLLOWING LABOR AND DELIVERY	T8112XA	Postprocedural septic shock, initial encounter
66914	SHOCK DURING OR FOLLOWING LABOR AND DELIVERY	T8119XA	Other postprocedural shock, initial encounter
7855	SHOCK NOS (no longer valid)	T882XXA	Shock due to anesthesia, initial encounter
78550	SHOCK, UNSPECIFIED	T886XXA	Anaphylactic reaction due to adverse effect of correct drug or medicament properly administered, initial encounter

- 78551 CARDIOGENIC SHOCK
- 78552 SEPTIC SHOCK
- 78559 SHOCK WITHOUT MENTION OF TRAUMA, OTHER
- 9950 OTHER ANAPHYLACTIC SHOCK
- 9954 SHOCK DUE TO ANESTHESIA
- 9980 POSTOPERATIVE SHOCK
 /*** NOT VALID AFTER OCTOBER 1, 2011 **
- 99800 POSTOPERATIVE SHOCK, UNSPECIFIED
- 99801 POSTOPERATIVE SHOCK, CARDIOGENIC
- 99802 POSTOPERATIVE SHOCK, SEPTIC
- 99809 POSTOPERATIVE SHOCK, OTHER
- 9994 ANAPHYLACTIC SHOCK, DUE TO SERUM
- 99941 ANAPHYLACTIC REACTION DUE TO ADMINISTRATION OF
 BLOOD AND BLOOD PARTICLES

- 99942 ANAPHYLACTIC REACTION DUE TO VACCINATION
- 99949 ANAPHYLACTIC REACTION DUE TO OTHER SERUM

Hemorrhage diagnosis codes: (HEMORID)

ICD-9-CM	Description	ICD-10-CM	Description
2851	ACUTE POSTHEMORRHAGIC ANEMIA	D62	Acute posthemorrhagic anemia
4590	OTHER DISORDERS OF CIRCULATORY SYSTEM, HEMORRHAGE, UNSPECIFIED	D7801	Intraoperative hemorrhage and hematoma of the spleen complicating a procedure on the spleen
56881	HEMOPERITONEUM	D7802	Intraoperative hemorrhage and hematoma of the spleen complicating other procedure
9582	CERTAIN EARLY COMPLICATIONS OF TRAUMA, SECONDARY AND RECURRENT HEMORRHAGE	D7821	Postprocedural hemorrhage and hematoma of the spleen following a procedure on the spleen
99811	HEMORRHAGE COMPLICATING A PROCEDURE	D7822	Postprocedural hemorrhage and hematoma of the spleen following other procedure

E3601	Intraoperative hemorrhage and hematoma of an endocrine system organ or structure complicating an endocrine system procedure
E3602	Intraoperative hemorrhage and hematoma of an endocrine system organ or structure complicating other procedure
G9731	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating a nervous system procedure
G9732	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating other procedure
G9751	Postprocedural hemorrhage and hematoma of a nervous system organ or structure following a nervous system procedure
G9752	Postprocedural hemorrhage and hematoma of a nervous system organ or structure following other procedure
H59111	Intraoperative hemorrhage and hematoma of right eye and adnexa complicating an ophthalmic procedure
H59112	Intraoperative hemorrhage and hematoma of left eye and adnexa complicating an ophthalmic procedure
H59113	Intraoperative hemorrhage and hematoma of eye and adnexa complicating an ophthalmic procedure, bilateral
H59119	Intraoperative hemorrhage and hematoma of unspecified eye and adnexa complicating an ophthalmic procedure
H59121	Intraoperative hemorrhage and hematoma of right eye and adnexa complicating other procedure

H59122	Intraoperative hemorrhage and hematoma of left eye and adnexa complicating other procedure
H59123	Intraoperative hemorrhage and hematoma of eye and adnexa complicating other procedure, bilateral
H59129	Intraoperative hemorrhage and hematoma of unspecified eye and adnexa complicating other procedure
H59311	Postprocedural hemorrhage and hematoma of right eye and adnexa following an ophthalmic procedure
H59312	Postprocedural hemorrhage and hematoma of left eye and adnexa following an ophthalmic procedure
H59313	Postprocedural hemorrhage and hematoma of eye and adnexa following an ophthalmic procedure, bilateral
H59319	Postprocedural hemorrhage and hematoma of unspecified eye and adnexa following an ophthalmic procedure
H59321	Postprocedural hemorrhage and hematoma of right eye and adnexa following other procedure
H59322	Postprocedural hemorrhage and hematoma of left eye and adnexa following other procedure
H59323	Postprocedural hemorrhage and hematoma of eye and adnexa following other procedure, bilateral
H59329	Postprocedural hemorrhage and hematoma of unspecified eye and adnexa following other procedure
H9521	Intraoperative hemorrhage and hematoma of ear and mastoid process complicating a procedure on the ear and mastoid process
H9522	Intraoperative hemorrhage and hematoma of ear and mastoid process complicating other procedure

H9541	Postprocedural hemorrhage and hematoma of ear and mastoid process following a procedure on the ear and mastoid process
H9542	Postprocedural hemorrhage and hematoma of ear and mastoid process following other procedure
I97410	Intraoperative hemorrhage and hematoma of a circulatory system organ or structure complicating a cardiac catheterization
I97411	Intraoperative hemorrhage and hematoma of a circulatory system organ or structure complicating a cardiac bypass
I97418	Intraoperative hemorrhage and hematoma of a circulatory system organ or structure complicating other circulatory system procedure
I9742	Intraoperative hemorrhage and hematoma of a circulatory system organ or structure complicating other procedure
I97610	Postprocedural hemorrhage and hematoma of a circulatory system organ or structure following a cardiac catheterization
I97611	Postprocedural hemorrhage and hematoma of a circulatory system organ or structure following cardiac bypass
I97618	Postprocedural hemorrhage and hematoma of a circulatory system organ or structure following other circulatory system procedure
I9762	Postprocedural hemorrhage and hematoma of a circulatory system organ or structure following other procedure
J9561	Intraoperative hemorrhage and hematoma of a respiratory system organ or structure complicating a respiratory system procedure

J9562	Intraoperative hemorrhage and hematoma of a respiratory system organ or structure complicating other procedure
J95830	Postprocedural hemorrhage and hematoma of a respiratory system organ or structure following a respiratory system procedure
J95831	Postprocedural hemorrhage and hematoma of a respiratory system organ or structure following other procedure
K661	Hemoperitoneum
K9161	Intraoperative hemorrhage and hematoma of a digestive system organ or structure complicating a digestive sytem procedure
K9162	Intraoperative hemorrhage and hematoma of a digestive system organ or structure complicating other procedure
K91840	Postprocedural hemorrhage and hematoma of a digestive system organ or structure following a digestive system procedure
K91841	Postprocedural hemorrhage and hematoma of a digestive system organ or structure following other procedure
L7601	Intraoperative hemorrhage and hematoma of skin and subcutaneous tissue complicating a dermatologic procedure
L7602	Intraoperative hemorrhage and hematoma of skin and subcutaneous tissue complicating other procedure
L7621	Postprocedural hemorrhage and hematoma of skin and subcutaneous tissue following a dermatologic procedure
L7622	Postprocedural hemorrhage and hematoma of skin and subcutaneous tissue following other procedure

M96810	Intraoperative hemorrhage and hematoma of a musculoskeletal structure complicating a musculoskeletal system procedure
M96811	Intraoperative hemorrhage and hematoma of a musculoskeletal structure complicating other procedure
M96830	Postprocedural hemorrhage and hematoma of a musculoskeletal structure following a musculoskeletal system procedure
M96831	Postprocedural hemorrhage and hematoma of a musculoskeletal structure following other procedure
N9961	Intraoperative hemorrhage and hematoma of a genitourinary system organ or structure complicating a genitourinary system procedure
N9962	Intraoperative hemorrhage and hematoma of a genitourinary system organ or structure complicating other procedure
N99820	Postprocedural hemorrhage and hematoma of a genitourinary system organ or structure following a genitourinary system procedure
N99821	Postprocedural hemorrhage and hematoma of a genitourinary system organ or structure following other procedure
R58	Hemorrhage, not elsewhere classified
T792XXA	Traumatic secondary and recurrent hemorrhage and seroma, initial encounter

Gastrointestinal hemorrhage diagnosis codes: (GASTRID)

ICD-9-CM	Description	ICD-10-CM	Description
4560	ESOPHAGEAL VARICES WITH BLEEDING	I8501	Esophageal varices with bleeding

45620	ESOPHAGEAL VARICES IN DISEASES CLASSIFIED ELSEWHERE WITH BLEEDING	I8511	Secondary esophageal varices with bleeding
5307	GASTROESOPHAGEAL LACERATION- HEMORRHAGE SYNDROME	K2211	Ulcer of esophagus with bleeding
53021	ULCER OF ESOPHAGUS WITH BLEEDING	K226	Gastro-esophageal laceration-hemorrhage syndrome
53082	ESOPHAGEAL HEMORRHAGE	K250	Acute gastric ulcer with hemorrhage
53100	GASTRIC ULCER ACUTE WITH HEMORRHAGE - WITHOUT MENTION OF OBSTRUCTION	K252	Acute gastric ulcer with both hemorrhage and perforation
53101	GASTRIC ULCER ACUTE WITH HEMORRHAGE - WITH OBSTRUCTION	K254	Chronic or unspecified gastric ulcer with hemorrhage
53120	GASTRIC ULCER ACUTE WITH HEMORRHAGE AND PERFORATION - WITHOUT MENTION OF OBSTRUCTION	K256	Chronic or unspecified gastric ulcer with both hemorrhage and perforation
53121	GASTRIC ULCER, ACUTE WITH HEMORRHAGE AND PERFORATION - WITH OBSTRUCTION	K260	Acute duodenal ulcer with hemorrhage
53140	GASTRIC ULCER CHRONIC OR UNSPECIFIED WITH HEMORRHAGE -WITHOUT MENTION OF OBSTRUCTION	K262	Acute duodenal ulcer with both hemorrhage and perforation
53141	GASTRIC ULCER CHRONIC OR UNSPECIFIED WITH HEMORRHAGE - WITH OBSTRUCTION	K264	Chronic or unspecified duodenal ulcer with hemorrhage
53160	GASTRIC ULCER CHRONIC OR UNSPECIFIED WITH HEMORRHAGE AND PERFORATION - WITHOUT MENTION OF OBSTRUCTION	K266	Chronic or unspecified duodenal ulcer with both hemorrhage and perforation
53161	GASTRIC ULCER CHRONIC OR UNSPECIFIED WITH HEMORRHAGE AND PERFORATION - WITH OBSTRUCTION	K270	Acute peptic ulcer, site unspecified, with hemorrhage
53200	DUODENAL ULCER ACUTE WITH HEMORRHAGE - WITHOUT MENTION OF OBSTRUCTION	K272	Acute peptic ulcer, site unspecified, with both hemorrhage and perforation
53201	DUODENAL ULCER ACUTE WITH HEMORRHAGE - WITH OBSTRUCTION	K274	Chronic or unspecified peptic ulcer, site unspecified, with hemorrhage

53220	DUODENAL ULCER ACUTE WITH HEMORRHAGE AND PERFORATION - WITHOUT MENTION OF OBSTRUCTION	K276	Chronic or unspecified peptic ulcer, site unspecified, with both hemorrhage and perforation
53221	DUODENAL ULCER ACUTE WITH HEMORRHAGE AND PERFORATION - WITH OBSTRUCTION	K280	Acute gastrojejunal ulcer with hemorrhage
53240	DUODENAL ULCER CHRONIC OR UNSPECIFIED WITH HEMORRHAGE - WITHOUT MENTION OF OBSTRUCTION	K282	Acute gastrojejunal ulcer with both hemorrhage and perforation
53241	DUODENAL ULCER CHRONIC OR UNSPECIFIED WITH HEMORRHAGE - WITH OBSTRUCTION	K284	Chronic or unspecified gastrojejunal ulcer with hemorrhage
53260	DUODENAL ULCER CHRONIC OR UNSPECIFIED WITH HEMORRHAGE AND PERFORATION - WITHOUT MENTION OF OBSTRUCTION	K286	Chronic or unspecified gastrojejunal ulcer with both hemorrhage and perforation
53261	DUODENAL ULCER CHRONIC OR UNSPECIFIED WITH HEMORRHAGE AND PERFORATION - WITH OBSTRUCTION	K2901	Acute gastritis with bleeding
53300	PEPTIC ULCER, SITE UNSPECIFIED ACUTE WITH HEMORRHAGE - WITHOUT MENTION OF OBSTRUCTION	K2921	Alcoholic gastritis with bleeding
53301	PEPTIC ULCER, SITE UNSPECIFIED, ACUTE WITH HEMORRHAGE - WITH OBSTRUCTION	K2931	Chronic superficial gastritis with bleeding
53320	PEPTIC ULCER, SITE UNSPECIFIED, ACUTE WITH HEMORRHAGE AND PERFORATION - WITHOUT MENTION OF OBSTRUCTION	K2941	Chronic atrophic gastritis with bleeding
53321	PEPTIC ULCER, SITE UNSPECIFIED, ACUTE WITH HEMORRHAGE AND PERFORATION - WITH OBSTRUCTION	K2951	Unspecified chronic gastritis with bleeding
53340	PEPTIC ULCER, SITE UNSPECIFIED CHRONIC OR UNSPECIFIED WITH HEMORRHAGE - WITHOUT MENTION OF OBSTRUCTION	K2961	Other gastritis with bleeding
53341	PEPTIC ULCER, SITE UNSPECIFIED, CHRONIC OR UNSPECIFIED WITH HEMORRHAGE - WITH OBSTRUCTION	K2971	Gastritis, unspecified, with bleeding

53360	PEPTIC ULCER, SITE UNSPECIFIED, CHRONIC OR UNSPECIFIED WITH HEMORRHAGE AND PERFORATION - WITHOUT MENTION OF OBSTRUCTION	K2981	Duodenitis with bleeding
53361	PEPTIC ULCER, SITE UNSPECIFIED, CHRONIC OR UNSPECIFIED WITH HEMORRHAGE AND PERFORATION - WITH OBSTRUCTION	K2991	Gastroduodenitis, unspecified, with bleeding
53400	GASTROJEJUNAL ULCER, ACUTE WITH HEMORRHAGE - WITHOUT MENTION OF OBSTRUCTION	K31811	Angiodysplasia of stomach and duodenum with bleeding
53401	GASTROJEJUNAL ULCER, ACUTE WITH HEMORRHAGE - WITH OBSTRUCTION	K3182	Dieulafoy lesion (hemorrhagic) of stomach and duodenum
53420	GASTROJEJUNAL ULCER, ACUTE WITH HEMORRHAGE AND PERFORATION - WITHOUT MENTION OF OBSTRUCTION	K5521	Angiodysplasia of colon with hemorrhage
53421	GASTROJEJUNAL ULCER, ACUTE WITH HEMORRHAGE AND PERFORATION - WITH OBSTRUCTION	K5701	Diverticulitis of small intestine with perforation and abscess with bleeding
53440	GASTROJEJUNAL ULCER, CHRONIC OR UNSPECIFIED WITH HEMORRHAGE - WITHOUT MENTION OF OBSTRUCTION	K5711	Diverticulosis of small intestine without perforation or abscess with bleeding
53441	GASTROJEJUNAL ULCER, CHRONIC OR UNSPECIFIED WITH HEMORRHAGE - WITH OBSTRUCTION	K5713	Diverticulitis of small intestine without perforation or abscess with bleeding
53460	GASTROJEJUNAL ULCER, CHRONIC OR UNSPECIFIED WITH HEMORRHAGE AND PERFORATION - WITHOUT MENTION OF OBSTRUCTION	K5721	Diverticulitis of large intestine with perforation and abscess with bleeding
53461	GASTROJEJUNAL ULCER, CHRONIC OR UNSPECIFIED WITH HEMORRHAGE AND PERFORATION - WITH OBSTRUCTION	K5731	Diverticulosis of large intestine without perforation or abscess with bleeding
53501	GASTRITIS AND DUODENITIS, ACUTE GASTRITIS WITH HEMORRHAGE	K5733	Diverticulitis of large intestine without perforation or abscess with bleeding
53511	GASTRITIS AND DUODENITIS, ATROPHIC GASTRITIS WITH HEMORRHAGE	K5741	Diverticulitis of both small and large intestine with perforation and abscess with bleeding

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53521	GASTRITIS AND DUODENITIS, GASTRIC MUCOSAL HYPERTROPHY, WITH HEMORRHAGE	K5751	Diverticulosis of both small and large intestine without perforation or abscess with bleeding
53531	GASTRITIS AND DUODENITIS, ALCOHOLIC GASTRITIS, WITH HEMORRHAGE	K5753	Diverticulitis of both small and large intestine without perforation or abscess with bleeding
53541	GASTRITIS AND DUODENITIS, OTHER SPECIFIED GASTRITIS - WITH HEMORRHAGE	K5781	Diverticulitis of intestine, part unspecified, with perforation and abscess with bleeding
53551	GASTRITIS AND DUODENITIS, UNSPECIFIED GASTRITIS AND GASTRODUODENITIS - WITH HEMORRHAGE	K5791	Diverticulosis of intestine, part unspecified, without perforation or abscess with bleeding
53561	GASTRITIS AND DUODENITIS, DUODENITIS - WITH HEMORRHAGE	K5793	Diverticulitis of intestine, part unspecified, without perforation or abscess with bleeding
53783	OTHER SPECIFIED DISORDERS OF STOMACH AND DUODENUM, ANGIODYSPLASIA OF STOMACH AND DUODENUM - WITH HEMORRHAGE	K625	Hemorrhage of anus and rectum
53784	DIEULAFOY LESION (HEMORRHAGIC) OF STOMACH AND DUODENUM	K6381	Dieulafoy lesion of intestine
56202	DIVERTICULOSIS OF SMALL INTESTINE -WITH HEMORRHAGE	K920	Hematemesis
56203	DIVERTICULITIS OF SMALL INTESTINE -WITH HEMORRHAGE	K921	Melena
56212	DIVERTICULOSIS OF COLON - WITH HEMORRHAGE	K922	Gastrointestinal hemorrhage, unspecified
56213	DIVERTICULITIS OF COLON - WITH HEMORRHAGE		
5693	HEMORRHAGE OF RECTUM AND ANUS		
56985	ANGIODYSPLASIA OF INTESTINE - WITH HEMORRHAGE		
56986	DIEULAFOY LESION (HEMORRHAGIC) OF INTESTINE		
5780	GASTROINTESTINAL HEMORRHAGE, HEMATEMESIS		
5781	GASTROINTESTINAL HEMORRHAGE, BLOOD IN STOOL		
5789	GASTROINTESTINAL HEMORRHAGE, HEMORRHAGE OF GASTROINTESTINAL TRACT, UNSPECIFIED		

Chronic renal failure diagnosis codes: (CRENLFD)

ICD-9-CM	Description	ICD-10-CM	Description
40301	MAL HYP KIDNEY W CHR KID	I120	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease
40311	BEN HYP KIDNEY W CHR KID	I1311	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease
40391	HYP KIDNEY NOS W CHR KID	I132	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease
40402	MAL HY HRT/KID W CHR KID	N185	Chronic kidney disease, stage 5
40403	MAL HYP HRT/KID W HF/KID	N186	End stage renal disease
40412	BEN HYP HT/KID W CHR KID		
40413	BEN HYP HT/KID W HF/KID		
40492	HYP HT/KID NOS W CHR KID		
40493	HYP HRT/KID NOS W HF/KID		
5855	CHRON KIDNEY DIS STAGE V		
5856	END STAGE RENAL DISEASE		

[Note: Codes that are no longer valid may be retained for compatibility with historical data. These codes will have no impact on numerator counts in more recent data using only currently valid codes.]