Perioperative Hemorrhage or Hematoma Rate Technical Specifications

Patient Safety Indicators 27 (PSI 27)

AHRQ Quality Indicators™ Version 5.0 March 2015
Area-Level Indicator
Type of Score: Rate

Description

Perioperative hemorrhage or hematoma cases with control of perioperative hemorrhage, drainage of hematoma, or a miscellaneous hemorrhage- or hematoma-related procedure following surgery per 100,000 population ages 18 years and older. Excludes cases with a diagnosis of coagulation disorder and obstetric cases.

[NOTE: The software provides the rate per population. However, common practice reports the measure as per 100,000 population. The user must multiply the rate obtained from the software by 100,000 to report events per 100,000 population.]

Numerator

Discharges, for patients ages 18 years and older, with either:

 any secondary ICD-9-CM diagnosis codes for perioperative hemorrhage or hematoma and any-listed ICD-9-CM procedure codes for control of perioperative hemorrhage or evacuation of hematoma;

ICD-9-CM Perioperative hemorrhage or hematoma diagnosis codes:

99811 HEMORRHAGE COMPLIC PROC 99812 HEMATOMA COMPLIC PROC

ICD-9-CM Control of perioperative hemorrhage and evacuation of hematoma procedure codes:

0121	INCISION AND DRAINAGE OF CRANIAL SINUS	400	INCISION OF LYMPHATIC STRUCTURES
0124	OTHER CRANIOTOMY	412	SPLENOTOMY
0131	INCISION OF CEREBRAL MENINGES	4209	OTHER INCISION OF ESOPHAGUS
0139	OTHER INCISION OF BRAIN	4221	OPERATIVE ESOPHAGOSCOPY BY INCISION
0213	LIGATION OF MENINGEAL VESSEL	4222	ESOPHAGOSCOPY THROUGH ARTIFICIAL STOMA
0239	OTHER OPERATIONS TO ESTABLISH DRAINAGE OF VENTRICLE	4223	OTHER ESOPHAGOSCOPY
0241	IRRIGATION AND EXPLORATION OF VENTRICULAR SHUNT	4233	ENDOSCOPIC EXCISION OR DESTRUCTION OF LESION OR TISSUE OF
0309	OTHER EXPLORATION AND DECOMPRESSION OF SPINAL CANAL	4239	OTHER DESTRUCTION OF LESION OR TISSUE OF ESOPHAGUS
0401	EXCISION OF ACOUSTIC NEUROMA	4291	LIGATION OF ESOPHAGEAL VARICES

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0404	OTHER INCISION OF CRANIAL AND PERIPHERAL NERVES	430	GASTROTOMY
0443	RELEASE OF CARPAL TUNNEL	4341	ENDOSCOPIC EXCISION OR DESTRUCTION OF LESION OR TISSUE OF
0444	RELEASE OF TARSAL TUNNEL	4411	TRANSABDOMINAL GASTROSCOPY
0602	REOPENING OF WOUND OF THYROID FIELD	4412	GASTROSCOPY THROUGH ARTIFICIAL STOMA
0609	OTHER INCISION OF THYROID FIELD	4413	OTHER GASTROSCOPY
0692	LIGATION OF THYROID VESSELS	4440	SUTURE PEPTIC ULCER NOS
0700	ADRENAL EXPLORATION NOS	4441	SUT GASTRIC ULCER SITE
0701	UNILAT ADRENAL EXPLORAT	4442	SUTURE DUODEN ULCER SITE
0702	BILAT ADRENAL EXPLORAT	4443	ENDOSC CONTROL GAST HEM
0741	INCISION OF ADRENAL GLAND	4444	TRANSCATH EMBO GAST HEM
0743	LIGATION OF ADRENAL VESSELS	4449	OTHER CONTROL GAST HEM
0751	EXPLORATION OF PINEAL FIELD	4491	LIGATION OF GASTRIC VARICES
0752	INCISION OF PINEAL GLAND	4500	INTESTINAL INCISION NOS
0771	EXPLORATION OF PITUITARY FOSSA	4501	DUODENAL INCISION
0772	INCISION OF PITUITARY GLAND	4502	SMALL BOWEL INCISION NEC
0791	EXPLORATION OF THYMUS FIELD	4503	LARGE BOWEL INCISION
0792	INCISION OF THYMUS	4511	TRANSABDOMINAL ENDOSCOPY OF
0705	THORACOCOODIO INCICION OF	4540	SMALL INTESTINE
0795	THORACOSCOPIC INCISION OF	4512	ENDOSCOPY OF SMALL INTESTINE
0000	THYMUS	4540	THROUGH ARTIFICIAL STOMA
0809	OTHER INCISION OF EYELID	4513	OTHER ENDOSCOPY OF SMALL INTESTINE
090	INCISION OF LACRIMAL GLAND	4516	ESOPHAGOGASTRODUODENOSCOPY
090	INCISION OF LACKIMAL GLAND	4310	(EGD) WITH CLOSED BIOPSY
0953	INCISION OF LACRIMAL SAC	4521	TRANSABDOMINAL ENDOSCOPY OF
0333	INDIDION OF LADINIMAL DAD	7021	LARGE INTESTINE
1244	EXCISION OF LESION OF CILIARY BODY	4522	ENDOSCOPY OF LARGE INTESTINE
	Excitation of Ecolotton Gleinter Bost	.022	THROUGH ARTIFICIAL STOMA
1289	OTHER OPERATIONS ON SCLERA	4523	COLONOSCOPY
149	OTHER OPERATIONS ON RETINA,	4524	FLEXIBLE SIGMOIDOSCOPY
	CHOROID, AND POSTERIOR CHAMBER		
1609	OTHER ORBITOTOMY	4543	ENDOSCOPIC DESTRUCTION OF
			OTHER LESION OR TISSUE OF LARGE
1802	INCISION OF EXTERNAL AUDITORY	4549	OTHER DESTRUCTION OF LESION OF
	CANAL		LARGE INTESTINE
1809	OTHER INCISION OF EXTERNAL EAR	480	PROCTOTOMY
1811	OTOSCOPY	4821	TRANSABDOMINAL
			PROCTOSIGMOIDOSCOPY
2001	MYRINGOTOMY WITH INSERTION OF	4822	PROCTOSIGMOIDOSCOPY THROUGH
0000	TUBE	4000	ARTIFICIAL STOMA
2009	OTHER MYRINGOTOMY	4823	RIGID PROCTOSIGMOIDOSCOPY
2021 2022	MASTOID INCISION	4921	ANOSCOPY LIGATION OF HEMORRHOIDS
2022	PETRUS PYRAM AIR CEL INC MIDDLE EAR INCISION	4945 4995	CONTROL OF (POSTOPERATIVE)
2023	WIDDLE EAR INCISION	4990	HEMORRHAGE OF ANUS
2079	OTHER INCISION, EXCISION, AND	500	HEPATOTOMY
2013	DESTRUCTION OF INNER EAR	300	TIET ATOTOWT
2100	CONTROL OF EPISTAXIS, NOT	5110	ENDOSCOPIC RETROGRADE
	OTHERWISE SPECIFIED	0110	CHOLANGIOPANCREATOGRAPHY
2101	CONTROL OF EPISTAXIS BY ANTERIOR	5111	ENDOSCOPIC RETROGRADE
	NASAL PACKING		CHOLANGIOGRAPHY
2102	CONTROL OF EPISTAXIS BY	5141	COMMON DUCT EXPLORATION FOR
	POSTERIOR (AND ANTERIOR) PACKING		REMOVAL OF CALCULUS
2103	CONTROL OF EPISTAXIS BY	5142	COMMON DUCT EXPLORATION FOR
	CAUTERIZATION (AND PACKING)		RELIEF OF OTHER OBSTRUCTION
2104	CONTROL OF EPISTAXIS BY LIGATION	5149	INCISION OF OTHER BILE DUCTS FOR
	OF ETHMOIDAL ARTERIES		RELIEF OF OBSTRUCTION
2105	CONTROL OF EPISTAXIS BY	5151	COMMON DUCT EXPLORATION
	(TRANSANTRAL) LIGATION OF THE		

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2106	CONTROL OF EPISTAXIS BY LIGATION OF THE EXTERNAL CAROTID	5159	BILE DUCT INCISION NEC
2107		5184	ENDOSCOPIC DILATION OF AMPULLA AND BILIARY DUCT
2109		5188	ENDOSCOPIC REMOVAL OF STONE(S) FROM BILIARY TRACT
211	INCISION OF NOSE	5196	PERCUTANEOUS EXTRACTION OF COMMON DUCT STONES
2121	RHINOSCOPY	5198	OTHER PERCUTANEOUS PROCEDURES ON BILIARY TRACT
2219	OTHER DIAGNOSTIC PROCEDURES ON NASAL SINUSES	5209	OTHER PANCREATOTOMY
2239		5213	ENDOSCOPIC RETROGRADE PANCREATOGRAPHY
2241		540	INCISION OF ABDOMINAL WALL
2251		5411	EXPLORATORY LAPAROTOMY
2252		5412	REOPENING OF RECENT LAPAROTOMY SITE
260	INCISION OF SALIVARY GLAND OR DUCT	5419	OTHER LAPAROTOMY
270	DRAINAGE OF FACE AND FLOOR OF MOUTH	5421	LAPAROSCOPY
280	INCISION AND DRAINAGE OF TONSIL AND PERITONSILLAR STRUCTURES	5495	INCISION OF PERITONEUM
287	CONTROL OF HEMORRHAGE AFTER TONSILLECTOMY AND ADENOIDECTOMY	5501	NEPHROTOMY
2911		5511	PYELOTOMY
_	OTHER INCISION OF LARYNX OR	5521	
313	TRACHEA	5521	NEPHROSCOPY
3141	TRACHEOSCOPY THROUGH ARTIFICIAL STOMA	5522	PYELOSCOPY
3142	TRACHEOSCOPY	562	URETEROTOMY
330	INCISION OF BRONCHUS	5631	URETEROSCOPY
331	INCISION OF LUNG	5719	OTHER CYSTOTOMY
3321	I BRONCHOSCOPY THROUGH ARTIFICIAL STOMA	5731	CYSTOSCOPY THROUGH ARTIFICIAL STOMA
3322		5732	OTHER CYSTOSCOPY
3323		5793	CONTROL OF (POSTOPERATIVE
			HEMORRHAGE OF BLADDER)
3324	CLOSED (ENDOSCOPIC) BIOPSY OF BRONCHUS	580	URETHROTOMY
3402		5822	OTHER URETHROSCOPY
3403	REOPENING OF RECENT	5909	OTHER INCISION OF PERIRENAL OR
	THORACOTOMY SITE		PERIURETERAL TISSUE
3409		5919	OTHER INCISION OF PERIVESICLE TISSUE
341	INCISION OF MEDIASTINUM	600	INCISION OF PROSTATE
3421	TRANSPLEURAL THORACOSCOPY	6081	INCISION OF PERIPROSTATIC TISSUE
3422		6094	CONTROL OF (POSTOPERATIVE) HEMORRHAGE OF PROSTATE
3582	PULMONARY VENOUS CONNECTION	610	INCISION AND DRAINAGE OF SCROTUM AND TUNICA AND VAGINALIS
3639 3699	OTHER OPERATIONS ON VESSELS OF	620 631	INCISION OF TESTIS EXCISION OF VARICOCELE AND
370	HEART PERICARDIOCENTESIS	636	HYDROCELE OF SPERMATIC CORD VASOTOMY
370 3711		6372	LIGATION OF SPERMATIC CORD
3799		6392	EPIDIDYMOTOMY
3800		6393	INCISION OF SPERMATIC CORD
3801		6492	INCISION OF SPERMATIC CORD
5001	HATTA COLATA VEGGEE HACIO	UTUL	INCIDION OF FEMILE

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3802	HEAD/NECK VES INCIS NEC	6501	LAPAROSCOPIC OOPHOROTOMY
3803	UPPER LIMB VESSEL INCIS	6509	OTHER OOPHOROTOMY
3804	INCISION OF AORTA	6601	SALPINGOTOMY
3805	THORACIC VESSEL INC NEC	680	HYSTEROTOMY
3806	ABDOMEN ARTERY INCISION	6811	DIGITAL EXAMINATION OF UTERUS
3807	ABDOMINAL VEIN INCISION	6812	HYSTEROSCOPY
3808	LOWER LIMB ARTERY INCIS	6824	1 /*UTERINE ART EMB W COILS (BEGIN
3000	LOWER LIND ARTERT INCID	0024	•
			2011)
3809	LOWER LIMB VEIN INCISION	6825	1 /*UTERINE ART EMB W/O COIL (BEGIN
			2011)
0050	VARIOCOE VI IO OTRIR NOO	0005	
3850	VARICOSE V LIG-STRIP NOS	6995	INCISION OF CERVIX
3851	INTCRAN VAR V LIG-STRIP	6998	OTHER OPERATIONS ON SUPPORTING
			STRUCTURES OF UTERUS
0050	LIEAD/NEOK MAD MALIO OTD	700	
3852	HEAD/NECK VAR V LIG-STR	700	CULDOCENTESIS
3853	ARM VARICOSE V LIG-STRIP	7012	CULDOTOMY
3855	THORAC VAR V LIG-STRIP	7014	OTHER VAGINOTOMY
	ABD VARICOS V LIGA-STRIP	7021	VAGINOSCOPY
3857		-	
3859	LEG VARICOS V LIGA-STRIP	7022	CULDOSCOPY
387	INTERRUPTION OF THE VENA CAVA	7109	OTHER INCISION OF VULVA AND
			PERINEUM
			_
3880	OTHER SURGICAL OCCLUSION OF	757	MANUAL EXPLORATION OF UTERINE
	UNSPECIFIED SITE		CAVITY, POSTPARTUM
3881	OTHER SURGICAL OCCLUSION OF	7591	EVACUATION OF OBSTETRICAL
3001		7331	
	INTRACRANIAL VESSELS		INCISIONAL HEMATOMA OF PERINEUM
3882	OTHER SURGICAL OCCLUSION OF	7592	EVACUATION OF OTHER HEMATOMA
	OTHER VESSELS OF HEAD AND NECK		OF VULVA OR VAGINA
0000		7740	
3883	OTHER SURGICAL OCCLUSION OF	7710	OTHER INCISION OF BONE WITHOUT
	UPPER LIMB VESSELS		DIVISION, UNSPECIFIED SITE
3884	OTHER SURGICAL OCCLUSION OF	8010	OTHER ARTHROTOMY, UNSPECIFIED
5004		0010	
	AORTA, ABDOMINAL		SITE
3885	OTHER SURGICAL OCCLUSION OF	8201	EXPLORATION OF TENDON SHEATH OF
	THORACIC VESSEL		HAND
3886	OTHER SURGICAL OCCLUSION OF	8202	MYOTOMY OF HAND
3000		0202	MITOTOMIT OF HAND
	ABDOMINAL ARTERIES		
3887	OTHER SURGICAL OCCLUSION OF	8203	BURSOTOMY OF HAND
	VESSELS ABDOMINAL VEINS	0_00	2011001011111011111111
		0004	INICIONAL AND DE AINA OF OF BALAAR
3888	OTHER SURGICAL OCCLUSION OF	8204	INCISION AND DRAINAGE OF PALMAR
	LOWER LIMB ARTERIES		OR THENAR SPACE
3889	OTHER SURGICAL OCCLUSION OF	8209	OTHER INCISION OF SOFT TISSUE OF
3003		0203	
	LOWER LIMB VEINS		HAND
3930	SUTURE OF VESSEL NOS	8301	EXPLORATION OF TENDON SHEATH
3931	SUTURE OF ARTERY	8302	MYOTOMY
3932	SUTURE OF VEIN	8303	BURSOTOMY
3941	CONTROL OF HEMORRHAGE	8309	OTHER INCISION OF SOFT TISSUE
	FOLLOWING VASCULAR SURGERY		
3952	OTHER REPAIR OF ANEURYSM	850	MASTOTOMY
3953	REPAIR OF ARTERIOVENOUS FISTULA	8603	INCISION OF PILONIDAL SINUS OR
			CYST
3972	ENDOVASCULAR REPAIR OR	8604	OTHER INCISION WITH DRAINAGE OF
3312		0004	
	OCCLUSION OF HEAD AND NECK		SKIN AND SUBCUTANEOUS TISSUE
	VESSELS		
3976	ENDOVASCULAR	8609	OTHER INCISION OF SKIN AND
0010		0000	
	EMBOLIZATION/OCCLUSION VESSELS		SUBCUTANEOUS TISSUE
	HEAD/NECK USING BIOACTIVE COILS		
3979	OTHER ENDOVASCULAR REPAIR (OF	9621	DILATION OF FRONTONASAL DUCT
30.0	ANEURYSM) OF OTHER VESSELS	3021	2.2.1.1.0.1 0.1 1.10.11.0.14.10/1L D001
398	OPERATIONS ON CAROTID BODY AND	9925	INJECTION OR INFUSION OF CANCER
	OTHER VASCULAR BODIES		CHEMOTHERAPEUTIC SUBSTANCE
3998			
	CONTROL OF HEMORRHAGE NOS	gaza	IN IECTION OR INFLISION OF OTHER
3990	CONTROL OF HEMORRHAGE NOS	9929	INJECTION OR INFUSION OF OTHER
3990	CONTROL OF HEMORRHAGE NOS	9929	INJECTION OR INFUSION OF OTHER THERAPEUTIC OR PROPHYLACTIC

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Exclude cases:

- 1. with any-listed ICD-9-CM diagnosis codes for coagulation disorder
- 2. MDC 14 (pregnancy, childbirth, and puerperium)
- 3. with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing)

ICD-9-CM Coagulation disorder diagnosis codes:

	•	<u> </u>		
2860	CONG FACTOR VIII DIS	SORDER	28652	ACQUIRED HEMOPHILIA
2861	CONG FACTOR IX DISC	ORDER	28659	OT HEM D/T CIRC ANTICOAG
2862	CONG FACTOR XI DISC	ORDER	2866	DEFIBRINATION SYNDROME
2863	CONG DEF CLOT FACT	TOR NEC	2867	ACQ COAGUL FACTOR DEF
2864	VON WILLEBRAND'S D	ISEASE	2869	COAGUL DEFECT NEC NOS

Denominator

Population ages 18 years and older in metropolitan are[†] or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

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[†] The term "metropolitan area" (MA) was adopted by the U.S. Census in 1990 and referred collectively to metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs) and primary metropolitan statistical areas (PMSAs). In addition, "area" could refer to either 1) FIPS county, 2) modified FIPS county, 3) 1999 OMB Metropolitan Statistical Area or 4) 2003 OMB Metropolitan Statistical Area. Micropolitan Statistical Areas are not used in the QI software.