

Postoperative Physiologic and Metabolic Derangement Rate

Patient Safety Indicators #10 Technical Specifications

Provider-Level Indicator

AHRQ Quality Indicators, Version 4.4, March 2012

Numerator

Discharges among cases meeting the inclusion and exclusion rules for the denominator with ICD-9-CM codes for physiologic and metabolic derangements in any secondary diagnosis field.

ICD-9-CM Physiologic and metabolic derangements diagnosis codes:

<u>Secondary Diabetes with ketoacidosis</u>		25013	DMI KETOACD UNCONTROLD
24910	SEC DM KETO NT ST UNCINTR	<u>Diabetes with hyperosmolarity</u>	
24911	SEC DM KETOACD UNCINTRLD	25020	DMII HPRSM NT ST UNCINTRL
24920	SEC DM HPROS NT ST UNCNR	25021	DMI HPRSM NT ST UNCINTRLD
24921	SEC DM HPROSMLR UNCINTRLD	25022	DMII HPROSMLR UNCONTROLD
24930	SEC DM OT CMA NT ST UNCN	25023	DMI HPROSMLR UNCONTROLD
24931	SEC DM OTH COMA UNCINTRLD	<u>Diabetes with other coma</u>	
<u>Diabetes with ketoacidosis</u>		25030	DMII O CM NT ST UNCINTRLD
25010	DMII KETO NT ST UNCINTRLD	25031	DMI I CM NT ST UNCINTRLD
25011	DMI KETO NT ST UNCINTRLD	25032	DMII OTH COMA INCONTROLD
25012	DMII KETOACD UNCONTROLD	25033	DMI OTH COMA UNCONTROLD

-----OR-----

with ICD-9-CM codes for acute renal failure in any secondary diagnosis field

ICD-9-CM Acute kidney failure diagnosis codes:

5845	AC KIDNY FAIL, TUBR NECR	5849	ACUTE KIDNEY FAILURE NOS
5846	AC KIDNY FAIL, CORT NECR	586	RENAL FAILURE NOS
5847	AC KIDNY FAIL, MEDU NECR	9975	SURG COML-URINARY TRACT
5848	ACUTE KIDNEY FAILURE NEC		

-----AND-----

with ICD-9-CM procedure code for dialysis.

ICD-9-CM Dialysis procedure codes:

3995	HEMODIALYSIS
5498	PERITONEAL DIALYSIS

Denominator

All elective [i.e., elective: SID Admission type # is recorded as elective (Admission Type = 3)] surgical discharges 18 years and older defined by specific DRGs or MS-DRGs and an ICD-9-CM code for an operating room procedure.

See *Patient Safety Indicators Appendices*:

- Appendix A – Operating Room Procedure Codes
- Appendix D – Surgical Discharge DRGs
- Appendix E – Surgical Discharge MS-DRGs

Exclude cases:

- with principal diagnosis or secondary diagnosis present on admission* of physiologic and metabolic derangements (see Numerator)
 - with acute renal failure (see Numerator) and a procedure code for dialysis **before or on the same day** as the first operating room procedure
Note: If day of procedure is not available in the input data file, the rate may be slightly lower than if the information was available.
 - with ketoacidosis, hyperosmolarity, or other coma (see Numerator) **and** a principal diagnosis or secondary diagnosis present on admission* of diabetes
 - with acute renal failure (see Numerator) **and** a principal diagnosis or secondary diagnosis present on admission* of acute myocardial infarction, cardiac arrhythmia, cardiac arrest, shock, hemorrhage, gastrointestinal hemorrhage, or 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)
- * Only for cases that otherwise qualify for the numerator

ICD-9-CM Chronic renal failure diagnosis codes:

40300	MAL HYP KID W CR KID I-IV	40411	BEN HYP HT/KD I-IV W HF
40301	MAL HYP KID W CR KID V	40412	BEN HY HT/KD ST V W/O HF
40310	BEN HY KID W CR KID I-IV	40413	BEN HY HT/KD STG V W HF
40311	BEN HYP KID W CR KID V	40490	HY HT/KD NOS I-IV W/O HF
40390	HY KID NOS W CR KID I-IV	40491	HYP HT/KD NOS I-IV W HF
40391	HYP KID NOS W CR KID V	40492	HY HT/KD NOS ST V W/O HF
40400	MAL HY HT/KD I-IV W/OHF	40493	HYP HT/KD NOS ST V W HF
40401	MAL HYP HT/KD I-IV W HF	585	CHRONIC RENAL FAILURE
40402	MAL HY HT/KD ST V W/O HF	5855	CHRON KIDNEY DIS STAGE V
40403	MAL HYP HT/KD STG V W HF	5856	END STAGE RENAL DISEASE
40410	BEN HY HT/KD I-IV W/O HF		

ICD-9-CM Diabetes diagnosis codes:

24900	SEC D, WP CMP NT ST UNCN	24931	SEC DM OTH COMA UNCNTRLD
24901	SEC DM WO COMP UNCONTRLD	24940	SEC DM RENT NT ST UNCNTR
24910	SEC DM KETO NT ST UNCNTR	24941	SEC DM RENAL UNCONTRLD
24911	SEC DM KETOACD UNCONTRLD	24950	SEC DM OPHTH NT ST UNCN
24920	SEC DM HPROS NT ST UNCNR	24951	SEC DM OPHTH UNCONTRLD
24921	SEC DM HPROSMLR UNCNTRLD	24960	SEC DM NEURO NT ST UNCN
24930	SEC DM OT CMA NT ST UNCN	24961	SEC DM NEURO UNCONTRLD

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24970	SEC DM CIRC NT ST UNCNTR	25041	DMI RENL NT ST UNCNTRLD
24971	SEC DM CIRC UNCONTRLD	25042	DMII RENAL UNCNTRLD
24980	SEC DM OTH NT ST UNCONTR	25043	DMI RENAL UNCNTRLD
24981	SEC DM OTHER UNCONTRLD	25050	DMII OPHTH NT ST UNCNTRLD
24990	SEC DM UNSP NT ST UNCON	25051	DMI OPHTH NT ST UNCNTRLD
24991	SEC DM UNSP UNCONTROL	25052	DMII OPHTH UNCNTRLD
25000	DMII WO CMP NT ST UNCNTR	25053	DMI OPHTH UNCNTRLD
25001	DMI WO CMP NT ST UNCNTRL	25060	DMII NEURO NT ST UNCNTRLD
25002	DMII WO CMP UNCNTRLD	25061	DMI NEURO NT ST UNCNTRLD
25003	DMI WO CMP UNCNTRLD	25062	DMII NEURO UNCNTRLD
25010	DMII KETO NT ST UNCNTRLD	25063	DMI NEURO UNCNTRLD
25011	DMI KETO NT ST UNCNTRLD	25070	DMII CIRC NT ST UNCNTRLD
25012	DMII KETOACD UNCONTROL	25071	DMI CIRC NT ST UNCNTRLD
25013	DMI KETOACD UNCONTROL	25072	DMII CIRC UNCNTRLD
25020	DMII HPRSM NT ST UNCNTRL	25073	DMI CIRC UNCNTRLD
25021	DMI HPRSM NT ST UNCNTRLD	25080	DMII OTH NT ST UNCNTRLD
25022	DMII HPROSMR UNCONTROL	25081	DMI OTH NT ST UNCNTRLD
25023	DMI HPROSMR UNCONTROL	25082	DMII OTH UNCNTRLD
25030	DMII O CM NT ST UNCNTRLD	25083	DMI OTH UNCNTRLD
25031	DMI O CM NT ST UNCNTRLD	25090	DMII UNSPF NT ST UNCNTRLD
25032	DMII OTH COMA UNCONTROL	25091	DMI UNSPF NT ST UNCNTRLD
25033	DMI OTH COMA UNCONTROL	25092	DMII UNSPF UNCNTRLD
25040	DMII RENL NT ST UNCNTRLD	25093	DMI UNSPF UNCNTRLD

ICD-9-CM Acute myocardial infarction diagnosis codes:

41000	AMI ANTEROLATERAL, UNSPEC	41050	AMI LATERAL NEC, UNSPEC
41001	AMI ANTEROLATERAL, INIT	41051	AMI LATERAL NEC, INITIAL
41010	AMI ANTERIOR WALL, UNSPEC	41060	TRY POST INFARCT, UNSPECT
41011	AMI ANTERIOR WALL, INIT	41061	TRY POST INFARC, INIT
41020	AMI INFEROLATERAL, UNSPEC	41070	SUBENDO INFARCT, UNSPEC
41021	AMI INFEROLATERAL, INIT	41071	SUBENDO INFARC, INITIAL
41030	AMI INFEROPOST, UNSPEC	41080	AMI NEC, UNSPECIFIED
41031	AMI INFEROPOST, INITIAL	41081	AMI NEC, INITIAL
41040	AMI INFERIOR WALL, UNSPEC	41090	AMI NOS, UNSPECIFIED
41041	AMI INFERIOR WALL, INIT	41091	AMI NOS, INITIAL

ICD-9-CM Cardiac arrhythmia diagnosis codes:

4260	ATRIOVENT BLOCK COMPLETE	42732	ATRIAL FLUTTER
4270	PAROX ATRIAL TACHYCARDIA	42741	VENTRICULAR FIBRILLATION
4271	PAROX VENTRIC TACHYCARD	42742	VENTRICULAR FLUTTER
4272	PAROX TACHYCARDIA NOS	4279	CARDIAC DYSRHYTHMIA NOS
42731	ATRIAL FIBRILLATION		

ICD-9-CM Cardiac arrest diagnosis code:

4275 CARDIAC ARREST

ICD-9-CM Shock diagnosis codes^{1,2}:

63450	SPON ABORT W SHOCK-UNSP	66911	OBSTETRIC SHOCK-DELIVER
63451	SPON ABORT W SHOCK-INC	66912	OBSTET SHOCK-DELIB W P/P
63452	SPON ABORT W SHOCK-COMP	66913	OBSTETRIC SHOCK-ANTEPAR
63550	LEGAL ABORT W SHOCK-UNSP	66914	OBSTETRIC SHOCK-POSTPART
63551	LEGAL ABORT W SHOCK-INC	7855	SHOCK W/O MENTION OF TRAUMA
63552	LEGAL ABORT W SHOCK-COMP	78550	SHOCK NOS
63650	ILLEG ABORT W SHOCK-UNSP	78551	CARDIOGENIC SHOCK
63651	ILLEG ABORT W SHOCK-INC	78552	SEPTIC SHOCK
63652	ILLEG ABORT W SHOCK-COMP	78559	SHOCK W/O TRAUMA NEC
63750	ABORT NOS W SHOCK-UNSP	9950	OTHER ANAPHYLACTIC REACT
63751	ABORT NOS W SHOCK-INC	9954	SHOCK DUE TO ANESTHESIA
63752	ABORT W SHOCK-COMP	99800	POSTOPERATIVE SHOCK, NOS
6385	ATTEM ABORTION W SHOCK	99801	POSTOP SHOCK, CARDIOGENIC
6395	POSTABORTION SHOCK	99802	POSTOP SHOCK, SEPTIC
66910	OBSTETRIC SHOCK-UNPSEC	99809	POSTOP SHOCK, OTHER

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9994 ANAPHYLACTIC SHOCK, DUE TO
SERUM

99942 ANAPHYL REACT D/T VACCIN
99949 ANAPH REACT D/T OT SERUM

99941 ANAPHYL D/T ADM BLD/PROD

¹ Italicized codes are not active in the current fiscal year.

² Bolded codes are new to the current fiscal year.

ICD-9-CM Hemorrhage diagnosis codes:

2851 AC POSTHEMMORHAG ANEMIA

9582 SECONDARY/RECUR HEMORR

4590 FARMERS' LUNG

99811 HEMORRHAGE COMPLIC PROC

56881 HEMOPERITONEUM

ICD-9-CM Gastrointestinal (GI) hemorrhage diagnosis codes:

4560 ESOPHAG VARICES W BLEED

53400 AC MARGINAL ULCER W HEM

45620 BLEED ESOPH VAR OTH DIS

53401 AC MARGIN ULC W HEM-OBST

5307 MALLORY-WEISS SYNDROME

53420 AC MARGIN ULC W HEM/PERF

53082 ESOPHAGEAL HEMORRHAGE

53421 AC MARG ULC HEM/PERF-OBS

53100 AC STOMACH ULCER W HEM

53440 CHR MARGINAL ULCER W HEM

53101 AC STOMAC ULC W HEM-OBST

53441 CHR MARGIN ULC W HEM-OBS

53120 AC STOMAC ULC W HEM/PERF

53460 CHR MARGIN ULC HEM/PERF

53121 AC STOM ULC HEM/PERF-OBS

53461 CHR MARG ULC HEM/PERF-OB

53140 CHR STOMACH ULC W HEM

53501 ACUTE GASTRITIS W HRHRG

53141 CHR STOM ULC W HEM-OBSTR

53511 ATRPH GASTRITIS W HMRHG

53160 CHR STOMACH ULC HEM/PERF

53521 GSTR MCSL HYPRT W HMRH

53161 CHR STOM ULC HEM/PERF-OB

53531 ALCHL GSTRITIS W HMRHG

53200 AC DUODENAL ULCER W HEM

53541 OTH SPG GASTRT W HMRHG

53201 AC DUODEN ULC W HEM-OBST

53551 GSTR/DDNTS NOS W HMRHG

53220 AC DUODEN ULC W HEM/PERF

53561 DUODENITIS W HMRHG

53221 AC DUOD ULC HEM/PERF-OBS

53783 ANGIO STM/DUDN W HMRHG

53240 CHR DIODEN ULCER W HEM

53784 DIEULAFOY LES,STOM&DUOD

53241 CHR DIODEN ULC HEM-OBSTR

56202 DVRTCLO SML INT W HMRHG

53260 CHR DUODEN ULC W PERF

56203 DVRTCLI SML INT W HMRHG

53261 CHR DUOD ULC HEM/PERF-OBS

56212 DVRTCLO COLON W HMRHG

53300 AC PEPTIC ULCER W HEMORR

56213 DVRTCLI COLON W HMRHG

53301 AC PEPTIC ULC W HEM-OBST

5693 TECTAL & ANAL SENOSIS

53320 AC PEPTIC ULC W HEM/PERF

56985 ANGIO INTES W HMRHG

53321 AC PEPT ULC HEM/PERF OBS

56986 DIEULAFOY LES, INTESTINE

53340 CHR PEPTIC ULCER W HEM

5780 HEMATEMESIS

53341 CHR PEPTIC ULC W HEM-OBS

5781 BLOOD IN STOOL

53360 CHR PEPT ULC W HEM/PERF

5789 GASTROINTEST HEMORR NOS

53361 CHR PEPT ULC HEM/PERF-OB