

Dehydration Admission Rate Technical Specifications

Prevention Quality Indicators #10 (PQI #10)

AHRQ Quality Indicators™, Version 5.0

March 2015

Area-Level Indicator

Type of Score: Rate

Description

Admissions with a principal diagnosis of dehydration per 100,000 population, ages 18 years and older. Excludes obstetric admissions and transfers from other institutions.

[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 admissions per 100,000 population.]

Numerator

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

- a principal ICD-9-CM diagnosis code for dehydration; or
- any secondary ICD-9-CM diagnosis codes for dehydration and a principal ICD-9-CM diagnosis code for hyperosmolality and/or hyponatremia, gastroenteritis, or acute kidney injury

[NOTE: By definition, discharges with a principal diagnosis of dehydration, hyperosmolality and/or hyponatremia, gastroenteritis, or acute kidney injury are precluded from an assignment of MDC 14 by grouper software. Thus, obstetric discharges should not be considered in the PQI rate, though the AHRQ QI™ software does not explicitly exclude obstetric cases.]

ICD-9-CM Dehydration diagnosis codes:

2765	HYPOVOLEMIA	27651	DEHYDRATION
27650	VOLUME DEPLETION	27652	HYPOVOLEMIA

ICD-9-CM Hyperosmolality and/or hyponatremia diagnosis codes:

2760	HYPEROSMOLALITY
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ICD-9-CM Gastroenteritis diagnosis codes:

00861	INTES INFEC ROTAVIRUS	00869	ENTERITIS NOS
00862	INTES INFEC ADENOVIRUS	0088	VIRAL ENTERITIS NOS
00863	INT INF NORWALK VIRUS	0090	INFECTIOUS ENTERITIS NOS
00864	INT INF OTH SML RND VRUS	0091	ENTERITIS OF INFECT ORIG
00865	INTES INFEC CALCIVIRUS	0092	INFECTIOUS DIARRHEA NOS
00866	INTES INFEC ASTROVIRUS	0093	DIARRHEA OF INFECT ORIG
00867	INT INF ENTEROVIRUS NEC	5589	NONINF GASTROENTERIT NEC

ICD-9-CM Acute kidney failure diagnosis code:

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 COMPL-URINARY TRACT
5848	ACUTE KIDNEY FAILURE NEC		

Exclude cases:

- transfer from a hospital (different facility)
- transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF)
- transfer from another health care facility
- with any-listed ICD-9-CM diagnosis codes for chronic renal failure
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing)

See *Prevention Quality Indicators Appendices*:

- Appendix A – Admission Codes for Transfers

ICD-9-CM Chronic renal failure diagnosis codes:

40301	MAL HYP KIDNEY W CHR KID	40413	BEN HYP HT/KID W HF/KID
40311	BEN HYP KIDNEY W CHR KID	40492	HYP HT/KID NOS W CHR KID
40391	HYP KIDNEY NOS W CHR KID	40493	HYP HRT/KID NOS W HF/KID
40402	MAL HY HRT/KID W CHR KID	5855	CHRON KIDNEY DIS STAGE V
40403	MAL HYP HRT/KID W HF/KID	5856	END STAGE RENAL DISEASE
40412	BEN HYP HT/KID W CHR KID		

Denominator

Population ages 18 years and older in metropolitan area[†] 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.

[†] 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.