



# Prevention Quality Indicator 10 (PQI 10) Dehydration Admission Rate

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Area-Level Indicator

Type of Score: Rate

## Prepared by:

Agency for Healthcare Research and Quality

U.S. Department of Health and Human Services

[www.qualityindicators.ahrq.gov](http://www.qualityindicators.ahrq.gov)

## 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-10-CM diagnosis code for dehydration; (**ACSDEHD\***) or
- any secondary ICD-10-CM diagnosis codes for dehydration (**ACSDEHD\***) and a principal ICD-10-CM diagnosis code for hyperosmolality and/or hypernatremia (**HYPERID\***) or
- any secondary ICD-10-CM diagnosis codes for dehydration (**ACSDEHD\***) and a principal ICD-10-CM diagnosis code for gastroenteritis (**ACPGASD\***) or
- any secondary ICD-10-CM diagnosis codes for dehydration (**ACSDEHD\***) and a principal ICD-10-CM diagnosis code for acute kidney injury (**PHYSIDB\***)

*[NOTE: By definition, discharges with a principal diagnosis of dehydration, hyperosmolality and/or hypernatremia, 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.]*

## NUMERATOR EXCLUSIONS

Exclude cases:

- with admission source for transferred from a different hospital or other health care facility (*Appendix A*) (UB04 Admission source - 2, 3)
- with a point of origin code for transfer from a hospital, Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF), or other healthcare facility (*Appendix A*) (UB04 Point of Origin - 4,5,6)
- with any-listed ICD-10-CM diagnosis codes for chronic renal failure (*CRENLFD* \*)
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing)

### [Appendix A - Admission Codes for Transfers](#)

## 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.

\* See below for code list

***Dehydration diagnosis codes: (ACSDEHD)***

E860	Dehydration	E869	Volume depletion, unspecified
E861	Hypovolemia		

***Hyperosmolality and/or hypernatremia diagnosis codes: (HYPERID)***

E870      Hyperosmolality and hypernatremia

***Gastroenteritis diagnosis codes: (ACPGASD)***

A080	Rotaviral enteritis	A0839	Other viral enteritis
A0811	Acute gastroenteropathy due to Norwalk agent	A084	Viral intestinal infection, unspecified
A0819	Acute gastroenteropathy due to other small round viruses	A088	Other specified intestinal infections
A082	Adenoviral enteritis	A09	Infectious gastroenteritis and colitis, unspecified
A0831	Calicivirus enteritis	K523	Indeterminate colitis
A0832	Astrovirus enteritis	K5289	Other specified noninfective gastroenteritis and colitis
		K529	Noninfective gastroenteritis and colitis, unspecified

***Acute kidney (renal) failure diagnosis codes: (PHYSIDB)***

N170	Acute kidney failure with tubular necrosis	N179	Acute kidney failure, unspecified
N171	Acute kidney failure with acute cortical necrosis	N19	Unspecified kidney failure
N172	Acute kidney failure with medullary necrosis	N990	Postprocedural (acute) (chronic) kidney failure
N178	Other acute kidney failure		

***Chronic renal failure diagnosis codes: (CRENLFD)***

I120	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease	N185	Chronic kidney disease, stage 5
I1311	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease	N186	End stage renal disease
I132	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease		