



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

**Prevention Quality Indicators #10 (PQI #10)  
Dehydration Admission Rate**

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

**Prepared by:**

Agency for Healthcare Research and Quality  
U.S. Department of Health and Human Services  
540 Gaither Road  
Rockville, MD 20850

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

## PQI #10 Dehydration Admission 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.]*

### PQI #10 Dehydration Admission Rate

#### NUMERATOR

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

- a principal ICD-9-CM or ICD-10-CM diagnosis code for dehydration; or
- any secondary ICD-9-CM or ICD-10-CM diagnosis codes for dehydration and a principal ICD-9-CM or ICD-10-CM diagnosis code for hyperosmolality and/or hypernatremia, gastroenteritis, or acute kidney injury

*[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.]*

#### Dehydration diagnosis codes: (ACSDEHD)

ICD-9-CM	Description	ICD-10-CM	Description
2765	HYPOVOLEMIA	E860	Dehydration
27650	VOLUME DEPLETION	E861	Hypovolemia
27651	DEHYDRATION	E869	Volume depletion, unspecified
27652	HYPOVOLEMIA		

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

ICD-9-CM	Description	ICD-10-CM	Description
2760	HYPEROSMOLALITY	E870	Hyperosmolality and hypernatremia

#### Gastroenteritis diagnosis codes: (ACPGASD)

ICD-9-CM	Description	ICD-10-CM	Description
00861	INTES INFEC ROTAVIRUS	A080	Rotaviral enteritis
00862	INTES INFEC ADENOVIRUS	A0811	Acute gastroenteropathy due to Norwalk agent
00863	INT INF NORWALK VIRUS	A0819	Acute gastroenteropathy due to other small round
00864	INT INF OTH SML RND VRUS	A082	Adenoviral enteritis

PQI #10 Dehydration Admission Rate

www.qualityindicators.ahrq.gov

00865	INTES INFEC CALCIVIRUS	A0831	Calicivirus enteritis
00866	INTES INFEC ASTROVIRUS	A0832	Astrovirus enteritis
00867	INT INF ENTEROVIRUS NEC	A0839	Other viral enteritis
00869	ENTERITIS NOS	A084	Viral intestinal infection, unspecified
0088	VIRAL ENTERITIS NOS	A088	Other specified intestinal infections
0090	INFECTIOUS ENTERITIS NOS	A09	Infectious gastroenteritis and colitis, unspecified
0091	ENTERITIS OF INFECT ORIG	K5289	Other specified noninfective gastroenteritis and colitis
0092	INFECTIOUS DIARRHEA NOS	K529	Noninfective gastroenteritis and colitis, unspecified
0093	DIARRHEA OF INFECT ORIG		
5589	NONINF GASTROENTERIT NEC		

<b><i>Acute kidney failure diagnosis codes: (PHYSIDB)</i></b>			
<b>ICD-9-CM</b>	<b>Description</b>	<b>ICD-10-CM</b>	<b>Description</b>
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

### PQI #10 Dehydration Admission Rate

<b>NUMERATOR EXCLUSIONS</b>
<p>Exclude cases:</p> <ul style="list-style-type: none"> <li>• transfer from a hospital (different facility)</li> <li>• transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF)</li> <li>• transfer from another health care facility</li> <li>• with any-listed ICD-9-CM or ICD-10-CM diagnosis codes for chronic renal failure</li> <li>• with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing)</li> </ul>

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

<b>Chronic renal failure diagnosis codes: (CRENLFD)</b>			
<b>ICD-9-CM</b>	<b>Description</b>	<b>ICD-10-CM</b>	<b>Description</b>
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

## PQI #10 Dehydration Admission Rate

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.

### **PQI #10 Dehydration Admission Rate**

<b>DENOMINATOR EXCLUSIONS</b>
-------------------------------

<i>Not Applicable</i>
-----------------------