



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

**Pediatric Quality Indicators #18 (PDI #18)
Urinary Tract Infection Admission Rate**

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

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PDI #18 Urinary Tract Infection Admission Rate

DESCRIPTION

Admissions with a principal diagnosis of urinary tract infection per 100,000 population, ages 3 months to 17 years. Excludes cases with kidney or urinary tract disorders, cases with a high- or intermediate-risk immunocompromised state (including hepatic failure and transplants), transfers from other institutions, and obstetric admissions.

[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.]

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NUMERATOR			
Discharges, for patients ages 3 months through 17 years, with a principal ICD-9-CM or ICD-10-CM diagnosis code for urinary tract infection.			
<i>Urinary tract infection diagnosis codes: (ACSUTID)</i>			
ICD-9-CM	Description	ICD-10-CM	Description
59010	AC PYELONEPHRITIS NOS	N10	Acute tubulo-interstitial nephritis
59011	AC PYELONEPHR W MED NECR	N119	Chronic tubulo-interstitial nephritis, unspecified
5902	RENAL/PERIRENAL ABSCESS	N12	Tubulo-interstitial nephritis, not specified as acute or
5903	PYELOURETERITIS CYSTICA	N151	Renal and perinephric abscess
59080	PYELONEPHRITIS NOS	N159	Renal tubulo-interstitial disease, unspecified
59081	PYELONEPHRIT IN OTH DIS	N16	Renal tubulo-interstitial disorders in diseases classified elsewhere
5909	INFECTION OF KIDNEY NOS	N2884	Pyelitis cystica
5950	ACUTE CYSTITIS	N2885	Pyeloureteritis cystica
5959	CYSTITIS NOS	N2886	Ureteritis cystica
5990	URIN TRACT INFECTION NOS	N3000	Acute cystitis without hematuria
		N3001	Acute cystitis with hematuria
		N3090	Cystitis, unspecified without hematuria
		N3091	Cystitis, unspecified with hematuria
		N390	Urinary tract infection, site not specified

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NUMERATOR EXCLUSIONS

Exclude cases:

- with any-listed ICD-9-CM or ICD-10-CM diagnosis codes for kidney/urinary tract disorder
- with any-listed ICD-9-CM or ICD-10-CM diagnosis codes for high-risk immunocompromised state
- with any-listed ICD-9-CM or ICD-10-PCS procedure codes for transplant (high-risk immunocompromised state procedures)
- with any-listed ICD-9-CM or ICD-10-CM diagnosis codes for intermediate-risk immunocompromised state (including hepatic failure)
- transfer from a hospital (different facility)
- transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF)
- transfer from another health care facility
- neonates if age in days is missing
- MDC 14 (pregnancy, childbirth, and puerperium)
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing)

[Appendix F – High-Risk Immunocompromised States](#)

[Appendix G – Intermediate-Risk Immunocompromised States](#)

[Appendix I – Definitions of Neonate, Newborn, Normal Newborn, and Outborn](#)

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

Kidney/urinary tract disorder diagnosis codes: (KIDNEY)

ICD-9-CM	Description	ICD-10-CM	Description
59000	CHR PYELONEPHRITIS NOS	N110	Nonobstructive reflux-associated chronic pyelonephritis
59001	CHR PYELONEPH W MED NECR	N111	Chronic obstructive pyelonephritis
59370	VESCOURETRL RFLUX UNSPCF	N118	Other chronic tubulo-interstitial nephritis
59371	VESICOURETERAL REFLUX UNILTRL	N119	Chronic tubulo-interstitial nephritis, unspecified
59372	VESICOURETERAL REFLUX NPHT BLTRL	N1370	Vesicoureteral-reflux, unspecified

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59373	VESICoureTERAL REFLUX W NPHT NOS	N1371	Vesicoureteral-reflux without reflux nephropathy
7530	RENAL AGENESIS	N13721	Vesicoureteral-reflux with reflux nephropathy without hydroureter, unilateral
75310	CYSTIC KIDNEY DISEAS NOS	N13722	Vesicoureteral-reflux with reflux nephropathy without hydroureter, unspecified
75311	CONGENITAL RENAL CYST	N13729	Vesicoureteral-reflux with reflux nephropathy with hydroureter, unilateral
75312	POLYCYSTIC KIDNEY NOS	N13731	Vesicoureteral-reflux with reflux nephropathy with hydroureter, bilateral
75313	POLYCYST KID-AUTOSOM DOM	N13732	Vesicoureteral-reflux with reflux nephropathy with hydroureter, unspecified
75314	POLYCYST KID-AUTOSOM REC	N13739	Obstructive and reflux uropathy, unspecified
75315	RENAL DYSPLASIA	N139	Renal agenesis, unilateral
75316	MEDULLARY CYSTIC KIDNEY	Q600	Renal agenesis, bilateral
75317	MEDULLARY SPONGE KIDNEY	Q601	Renal agenesis, unspecified
75319	CYSTIC KIDNEY DISEAS NEC	Q602	Renal hypoplasia, unilateral
75320	OBS DFCT REN PLV&URT NOS	Q603	Renal hypoplasia, bilateral
75321	CONGEN OBST URTROPLV JNC	Q604	Renal hypoplasia, unspecified
75322	CONG OBST URETEROVES JNC	Q605	Potters syndrome
75323	CONGENITAL URETEROCELE	Q606	Congenital renal cyst, unspecified
75329	OBST DEF REN PLV&URT NEC	Q6100	Congenital single renal cyst
7533	KIDNEY ANOMALY NEC	Q6101	Congenital multiple renal cysts
7534	URETERAL ANOMALY NEC	Q6102	Cystic dilatation of collecting ducts
7535	EXSTROPHY OF URINARY BLADDER	Q6111	Other polycystic kidney, infantile type
7536	ATRESIA AND STENOSIS OF URETHRA AND BLADDER NECK	Q6119	
7538	CYSTOURETHRAL ANOM NEC	Q612	Polycystic kidney, adult type
7539	URINARY ANOMALY NOS	Q613	Polycystic kidney, unspecified
		Q614	Renal dysplasia
		Q615	Medullary cystic kidney
		Q618	Other cystic kidney diseases

Q619	Cystic kidney disease, unspecified
Q620	Congenital hydronephrosis
Q6210	Congenital occlusion of ureter, unspecified
Q6211	Congenital occlusion of ureteropelvic junction
Q6212	Congenital occlusion of ureterovesical orifice
Q622	Congenital megaureter
Q6231	Congenital ureterocele, orthotopic
Q6232	Cecoureterocele
Q6239	Other obstructive defects of renal pelvis and ureter
Q624	Agenesis of ureter
Q625	Duplication of ureter
Q6260	Malposition of ureter, unspecified
Q6261	Deviation of ureter
Q6262	Displacement of ureter
Q6263	Anomalous implantation of ureter
Q6269	Other malposition of ureter
Q627	Congenital vesico-uretero-renal reflux
Q628	Other congenital malformations of ureter
Q630	Accessory kidney
Q631	Lobulated, fused and horseshoe kidney
Q632	Ectopic kidney
Q633	Hyperplastic and giant kidney
Q638	Other specified congenital malformations of kidney
Q639	Congenital malformation of kidney, unspecified
Q6410	Exstrophy of urinary bladder, unspecified
Q6411	Supravesical fissure of urinary bladder
Q6412	Cloacal extrophy of urinary bladder
Q6419	Other exstrophy of urinary bladder
Q642	Congenital posterior urethral valves
Q6431	Congenital bladder neck obstruction
Q6432	Congenital stricture of urethra
Q6433	Congenital stricture of urinary meatus

Q6439	Other atresia and stenosis of urethra and bladder neck
Q645	Congenital absence of bladder and urethra
Q646	Congenital diverticulum of bladder
Q6470	Unspecified congenital malformation of bladder and urethra
Q6471	Congenital prolapse of urethra
Q6472	Congenital prolapse of urinary meatus
Q6473	Congenital urethrorectal fistula
Q6474	Double urethra
Q6475	Double urinary meatus
Q6479	Other congenital malformations of bladder and urethra
Q648	Other specified congenital malformations of urinary system
Q649	Congenital malformation of urinary system, unspecified

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DENOMINATOR

Population ages 3 months through 17 years in metropolitan area¹ 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.

¹ 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.

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DENOMINATOR EXCLUSIONS
<i>Not Applicable</i>