Supplemental File – Cohort Inclusion/Exclusion Criteria

Patients are included in a physician's AF if they meet all of the following criteria:
- ➢ female (based on PharmaNet information), and
- ➢ had a visit with a diagnosis of UTI recorded in MSP claims between December 27, 2018 and December 31, 2020, and
  - ○ ICD-9 diagnosis codes: cystitis (595, 595.0, 595.3-595.9), UTI site not specified (599, 599.0, 599.8, 599.9), symptoms involving urinary system or dysuria (788, 788.9, 788.1), other disorders of bladder (596.X), hematuria (599.7), or nonspecific findings on examination of urine (791.X), where X stands for any characters
- ➢ filled an oral antibiotic with that physician's prescribing number in PharmaNet within 5 days of the physician visit and between January 1, 2019 and December 31, 2020, and
- ➢ were registered with the MSP at any time in 2019-2020, and
- ➢ were age ≥15 years at time of dispensation

Patients are excluded from a physician's AF if they meet any of the following criteria (all dates calculated from date of physician visit when UTI was diagnosed):
- ➢ were pregnant, defined as female with a pregnancy diagnosis code in the 270 days before UTI visit and without a delivery/pregnancy outcome code before UTI visit, or
- ➢ had recurrent UTI, defined as an MSP record of physician visit with a diagnosis of UTI in the prior 90 days and/or ≥4 visits in the 3 years before the UTI visit, or
- ➢ were discharged from hospital in the previous 30 days before the UTI visit, or
- ➢ were diagnosed with kidney disease or infection (pyelonephritis) in the previous or following 10 days, or
- ➢ were diagnosed with chronic kidney disease in the previous 365 days, or
- ➢ had indwelling catheter in the prior 91 days, or
- ➢ were diagnosed with impaired renal function in the previous 365 days, or
- ➢ had structural or functional abnormality of the urinary tract diagnosed in the previous 365 days, defined as stones, ureteral abnormalities/ vesicoureteral reflux, neurogenic bladder, or neurologic condition, or
- ➢ were diagnosed with an STI in the 14 days before or after UTI visit, or
- ➢ had systemic (oral, intravenous, or injection) antibiotic use in the prior 3 months, as recorded in PharmaNet: amoxicillin, cefalexin, nitrofurantoin, amoxicillin and beta-lactamase inhibitor, doxycycline, azithromycin, ciprofloxacin, sulfamethoxazole and trimethoprim, clindamycin, clarithromycin, cefixime, phenoxymethylpenicillin, fosfomycin, moxifloxacin, minocycline, cefuroxime, tetracycline, cloxacillin, erythromycin, cefadroxil, levofloxacin, ceftriaxone, trimethoprim, ertapenem, daptomycin, vancomycin, cefazolin, meropenem, piperacillin and beta-lactamase inhibitor, ampicillin, cefprozil, linezolid, ceftazidime, norfloxacin, tobramycin, gentamicin, benzylpenicillin, colistin, amikacin, metronidazole, cefoxitin, imipenem and cilastatin, tigecycline, ceftolozane and beta-lactamase inhibitor, cefepime, ceftobiprole medocaril, spiramycin, cefotaxime, benzathine phenoxymethylpenicillin, fusidic acid, or methenamine, or
- ➢ were registered with MSP for <77 of the previous 91 days, or
- ➢ were on PharmaCare plan P (palliative) or plan B (long-term care) on date of dispensation or within 3 months

Disease/condition	Identification period relative to the UTI visit	MSP: ICD-9 codes	Hospital/ICD-10 codes	MSP: Fee items
Pregnancy	Prior 270 days			14090, 14091, 36360, 36361, or 04717

Supplemental material

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Pregnancy outcome (delivery, abortion)	Prior 270 days and after pregnancy code	630.X, 631.X, 632.X, 633.X, 634.X, 635.X, 636.X, 637.X, V24.X, V27.X, 656.4	O02.X, O03.X, O04.X, O05.X, Z37.X, O36.4X	
Recurrent UTI	Prior 90 days (1+ visit) / prior 3 years (4+ visits)	595, 595.0, 595.3-595.9, 599, 599.0, 599.8, 599.9, 788, 788.9, 788.1, 596.X, 599.1, 791.X		
Kidney disease or infection (pyelonephritis)	Prior or following 10 days	590, 590.1, 590.2, 590.8, 590.9	10 N10, N12, N15.1, N.16	
Chronic kidney disease	Prior 365 days	585.X	N18.X	MSP complex care CKD codes N585, R585, I585, H585, D585, C585, K573
Indwelling catheter	Prior 91 days	V53.6, 996.64, 996.76, 996.31	T83.0X, Z46.6, Z96.0	
Impaired renal function	Prior 365 days			33758, 33723, 33759, 33761, or seen by a nephrologist
Structural or functional abnormality of the urinary tract	Prior 365 days	592.X, 594.X, 593.X, 753.1, 596.4, 596.5, 344.6, 323.X, 323.X, 336.X, 337.X, 340.X, 341.X, 343.X, 344.X, 952.X	N20.X, N21.X, N13.X, N28.83, Q61.X, G83.4, N31.X, N32.81, N36.44, G05.4, G23.0, G35.X, G36.X, G37.X, G80.0-G80.2, G81, G82.5, G90.4, G95.0, S14.101-S14.104	
STI	Prior or following 14 days	091-094, 096-099, 099.0-099.4, 099.8, 099.9, 078	A51-A60, A63, A64, A74.8, A74.9	
Systemic antibiotic use	Prior 3 months	Dispensed Rx via PharmaNet for: amoxicillin, cefalexin, nitrofurantoin, amoxicillin and beta-lactamase inhibitor, doxycycline, azithromycin, ciprofloxacin, sulfamethoxazole and trimethoprim, clindamycin, clarithromycin, cefixime, phenoxymethylpenicillin, fosfomycin, moxifloxacin, minocycline, cefuroxime, tetracycline, cloxacillin, erythromycin, cefadroxil, levofloxacin, ceftriaxone, trimethoprim, ertapenem, daptomycin, vancomycin, cefazolin, meropenem, piperacillin and beta-lactamase inhibitor, ampicillin, cefprozil, linezolid, ceftazidime, norfloxacin, tobramycin, gentamicin, benzylpenicillin, colistin, amikacin, metronidazole, cefoxitin, imipenem and cilastatin, tigecycline, ceftolozane and beta-lactamase inhibitor, cefepime,		

		ceftobiprole medocaril, spiramycin, cefotaxime, benzathine phenoxymethylpenicillin, fusidic acid, or methenamine,