ACUTE UNCOMPLICATED CYSTITIS IN WOMEN CLINICAL DECISION AID¹

IMPORTANT CONSIDERATIONS: Does not apply to men, children, pregnant women or nursing home resident,

OR Upper Tract UTI (fever, nausea or vomiting, flank discomfort, systemically unwell, hypotension)

<u>OR</u> **Complicated UTI** (include upper tract symptoms, catheter use, immunocompromised state, renal anatomic abnormalities or obstructive uropathy, neurogenic bladder, and <u>possibly</u> diabetes or age>55).

Clinical judgment in each situation is needed to determine if the above Aid applies

TO DECIDE ABOUT INITIAL ANTIBIOTICS OR CULTURE, ASSESS FOR¹:

Criteria:	Points
Dysuria	1
Urinary Leukocyte esterase positive (>trace)	1
Urinary nitrite positive (any)	1

For:	Rate of Positive Urine CULTURE ¹	SUGGESTED Management
1 or fewer	30-35%	Obtain Urine CULTURE; Wait for result to decide about antibiotics Consider <i>Delayed Prescription</i> if uncomfortable OR <i>Ibuprofen*</i>
2 or more	65-75%	Empiric Antibiotic appropriate (in mild S&S, some prefer culture & wait) Culture OPTIONAL if Rx; consider if no improvement, resistance concern

^{*} Ibuprofen provided symptom relief comparable to antibiotics in one trial²

RECOMMENDED ANTIBIOTICS³

Recommended First Line:	Nitrofurantoin macrocrystals 100 mg po bid x 5 days

TMP-SMX** DS 1 tab po bid x 3 days \dagger

Fosfomycin 1 sachet po x 1 dose

IF Allergy or Documented Resistance to Above ³:

Ciprofloxacin 250-500mg po bid x 3 day

Quinolone resistance is increasing; use is linked to C.difficile, achilles tendon rupture. Minimize use recommended³.

^{**} Canadian E.coli TMP-SMX resistance remains below 20%⁴, the IDSA³ suggested threshold for not using TMP-SMX

^{1.}McIsaac WJ, Moineddin R, Mazzulli T. Validation of a decision aid to assist physicians in reducing unnecessary antibiotic drug use for acute cystitis. *Arch Intern Med* 2007; 167:2201-06.

^{2.} Gagyor et al. Ibuprofen RCT Ibuprofen versus fosfomycin for uncomplicated urinary tract infection in women: randomised controlled trial. BMJ 2015;351:h6544

^{3.} Gupta K et al. International clinical practice guidelines for the treatment of acute uncomplicated cystitis and pyelonephritis in women: A 2010 update by the Infectious Disease Society of America and the European Society for Microbiology and infectious Disease Clin Infect Diseases 2011;52:e103-20.

^{4.} McIsaac WJ et al. Antibiotic resistant Eschericia coli in women with acute cystitis in Canada. Can J Infect Dis 23:143, 2013.