



S I G N

**PROPOSED REVIEW OF SIGN GUIDELINE
CONSULTATION SUMMARY**

Title of guideline	SIGN 88 Management of suspected bacterial UTI in adults
Date of publication	July 2006
SIGN summary of the scoping search	<p>Grabe M, Bishop MC, Bjerklund-Johansen TE, Botto H, Çek M, Lobel B, Naber KG, Palou J, Tenke P. Guidelines on the management of urinary and male genital tract infections. Arnhem, The Netherlands: European Association of Urology (EAU); 2008 http://www.uroweb.org/fileadmin/tx_eauguidelines/2009/Full/Urological_Infections.pdf</p> <p>Stohrer M, Castro-Diaz D, Chartier-Kastler E, Del Popolo G, Kramer G, Pannek J, Radziszewski P, Wyndaele JJ. Guidelines on neurogenic lower urinary tract dysfunction. Arnhem, The Netherlands: European Association of Urology (EAU); 2008 http://www.uroweb.org/fileadmin/tx_eauguidelines/2009/Full/Neurogenic_LUTS.pdf</p> <p>Lo E, Nicolle L, Classen D, Arias KM, Podgorny K, Anderson DJ, Burstin H, Calfee DP, Coffin SE, Dubberke ER, Fraser V, Gerding DN, Griffin FA, Gross P, Kaye KS, Klompas M, Marschall J, Mermel LA, Pegues DA, Perl TM, Saint S, Salgado CD, Weinstein RA, Wise R, Yokoe DS. Strategies to prevent catheter-associated urinary tract infections in acute care hospitals. Infect Control Hosp Epidemiol 2008 Oct;29 Suppl 1:S41-50.</p> <p>Sandler CM, Francis IR, Baumgarten DA, Bluth EI, Bush WH Jr, Casalino DD, Curry NS, Israel GM, Jafri SZ, Kawashima A, Papanicolaou N, Remer EM, Spring DB, Fulgham P, Expert Panel on Urologic Imaging. Suspected lower urinary tract trauma. [online publication]. Reston (VA): American College of Radiology (ACR); 2007. http://www.acr.org/SecondaryMainMenuCategories/quality_safety/app_criteria/pdf/ExpertPanelonUrologicImaging/SuspectedLowerUrinaryTractTraumaDoc19.aspx</p> <p>American College of Obstetricians and Gynecologists (ACOG). Treatment of urinary tract infections in nonpregnant women. Washington (DC): American College of Obstetricians and Gynecologists (ACOG); 2008 http://guidelines.gov/summary/summary.aspx?doc_id=12628&nbr=6536</p> <p>University of Michigan Health System. Urinary tract infection. Ann Arbor (MI): University of Michigan Health System; 2005 http://cme.med.umich.edu/pdf/guideline/uti.pdf</p> <p>Nicolle LE, Bradley S, Colgan R, Rice JC, Schaeffer A, Hooton TM. Infectious Diseases Society of America guidelines for the diagnosis and treatment of asymptomatic bacteriuria in adults. Clin Infect Dis 2005 Mar 1;40(5):643-54. http://www.guideline.gov/summary/summary.aspx?doc_id=6566&nbr=004128&string=</p> <p>HTAs and systematic reviews</p> <p>Little P, Turner S, Rumsby K, Warner G, Moore M, Lowes JA, et al (2009) Dipsticks and diagnostic algorithms in urinary tract infection: development and validation, randomised trial, economic analysis, observational cohort, and</p>

	<p>qualitative study. Volume 13, number 19 http://www.ncchta.org/fullmono/mon1319.pdf</p> <p>Pohl A. Modes of administration of antibiotics for symptomatic severe urinary tract infections. <i>Cochrane Database of Systematic Reviews</i> 2007, Issue 4.</p> <p>Jepson RG, Craig JC. Cranberries for preventing urinary tract infections. <i>Cochrane Database of Systematic Reviews</i> 2008, Issue 1.</p> <p>St John A, Boyd J C, Lowes A J, Price C P. The use of urinary dipstick tests to exclude urinary tract infection: a systematic review of the literature. <i>American Journal of Clinical Pathology</i>.2006;126(3):428-436.</p> <p>Perrotta C, Aznar M, Mejia R, Albert X, Ng CW. Oestrogens for preventing recurrent urinary tract infection in postmenopausal women. <i>Cochrane Database of Systematic Reviews</i> 2008, Issue 2.</p> <p>Milo G, Katchman E, Paul M, Christiaens T, Baerheim A, Leibovici L. Duration of antibacterial treatment for uncomplicated urinary tract infection in women. <i>Cochrane Database of Systematic Reviews</i> 2005, Issue 2.</p> <p>Rafalsky VV, Andreeva IV, Rjabkova EL. Quinolones for uncomplicated acute cystitis in women. <i>Cochrane Database of Systematic Reviews</i> 2006, Issue 3.</p> <p>Lutters M, Vogt-Ferrier NB. Antibiotic duration for treating uncomplicated, symptomatic lower urinary tract infections in elderly women. <i>Cochrane Database of Systematic Reviews</i> 2008, Issue 3.</p> <p>Smaill FM, Vazquez JC. Antibiotics for asymptomatic bacteriuria in pregnancy. <i>Cochrane Database of Systematic Reviews</i> 2007, Issue 2.</p> <p>Johnson J R, Kuskowski M A, Wilt T J. Systematic review: antimicrobial urinary catheters to prevent catheter-associated urinary tract infection in hospitalized patients. <i>Annals of Internal Medicine</i>.2006;144(2):116-126.</p> <p>Fernandez R S, Griffiths R D. Duration of short-term indwelling catheters: a systematic review of the evidence. <i>Journal of Wound Ostomy and Continence Nursing</i>.2006;33(2):145-155.</p>
<p>Main conclusions from new evidence</p>	<ul style="list-style-type: none"> • To achieve good symptom control and reduce antibiotic use clinicians should either offer a 48-hour delayed antibiotic prescription to be used at the patient’s discretion or target antibiotic treatment by dipsticks (positive nitrite or positive leucocytes and blood) with the offer of a delayed prescription if dipstick results are negative. • No evidence that oral antibiotic therapy is less effective for treating urinary tract infection than intravenous antibiotics. • Three days of treatment were adequate to achieve symptomatic relief for most patients, but it appears that longer therapy is better in terms of bacteria elimination from the urine, no matter what antibiotic is used. • There is some evidence that dipstick tests can be used to rule out UTI in certain circumstances. <p>Women</p> <ul style="list-style-type: none"> • Antibiotic treatment of 3 to 6 days could be sufficient for treating uncomplicated UTIs in elderly women • Vaginal oestrogens reduced the number of UTIs when compared to placebo. All studies reported adverse events for the oestrogen treatment groups. • There is no evidence of difference in clinical and microbiological efficacy of quinolones for uncomplicated acute cystitis in women, but there is some evidence of differences in occurrence and range of adverse reactions. <p>Pregnant women</p> <ul style="list-style-type: none"> • Antibiotics can reduce the risk of kidney infections in pregnant women who have a urine infection but no symptoms of infection. <p>Catheters</p>

	<ul style="list-style-type: none"> • Compared with standard catheters, antimicrobial urinary catheters can prevent catheter-associated bacteriuria in hospitalised patients during short-term catheterisation. • There were no significant differences in patient outcome as a result of different catheterisation durations
New areas that could be added to the guideline	
Summary of the recommendations that could be updated	

Please answer the following questions as fully as possible:

Specialties:	Microbiology (3), Urology (1), Nursing (1), General practice (1), other (5)
1(a) Is there still a requirement for an evidence-based guideline on this topic?	Yes
1(b) If no, should the guideline be withdrawn?	
2(a) Based on the information given above, and your own clinical judgement, does the guideline require revision in the light of new evidence? Please give details.	<p>Section 2.2.3: Revise to include guidance on the downsides of dipstick testing and the need for proper quality assurance.</p> <p>Section 2.4 The specific antibiotic recommendations, especially regarding the use of fluoroquinolones, and other agents that have been associated with a potential increased risk of <i>C.difficile</i> infection should be revisited to reassess the role of alternative agents.</p> <p>Section 2.4.2: The range of antibiotics and risks and benefits should be revised.</p> <p>Section 2.4.2/5.4.1: The role of ciprofloxacin should be updated.</p> <p>Section 2.5: There is a need for a section on management of recurrent UTI.</p> <p>Section 2.7.2: Clarify the section on telephone consultations.</p> <p>Section 4.2: The range of antibiotics and risks and benefits should be revised.</p> <p>Section 5: Needs to be revised re antibacterial coated catheters.</p> <p>Section 5.3: Guidance on the efficacy of a single dose gentamicin prophylaxis for changing a urinary catheter is needed.</p> <p>Section 5.4.1 The range of antibiotics and risks and benefits should be revised.</p> <p>Section 7.4: The recommendation regarding routine sampling of urine for culture from all patients presenting with acute urinary symptoms in some selected practices to establish the true level of resistance in bacteria causing acute UTI in general practice needs to be re-emphasised and expanded.</p>
2(b) If no, is there a need to scope for new evidence on a yearly basis?	No, every 2-3 years.
2(c) Do you agree with the assessment of the impact of the new evidence and its likely effect on recommendations?	<p>Variable</p> <p>There are issues with the sections on antibiotic prescribing, centring mainly on frequent and rapid changes in prescribing policy, and on issues associated with <i>C. difficile</i> infections. Local policies may differ depending on the pattern of antibiotic resistance in each NHS Board area. This, together with the rate of change, means that maintaining an accurate and valid guideline over the complete range of treatments is not practical.</p> <p>The other issue that needs to be given more attention in an update is the management of UTIs in catheterised patients. This is a particular issue in care homes, where good diagnostic and prescribing practices are important in relation to minimising the risk of <i>C. diff</i> infections.</p>

2(d) If yes, please suggest clinical questions that could be addressed in the revision?	
<p>Antibiotic prophylaxis for urinary catheter change.</p> <p>Risks and harms of antibiotics for <i>C. difficile</i> for individual and local community</p> <p>Prevention, and indications for catheter insertion and removal</p> <p>Management of catheter associated infection</p> <p>Management of females with recurrent lower UTIs who wish to avoid long term ABs.</p> <p>Management of ESBL UTIs</p>	
3(a) Please list any additions to the remit of the guideline that you think would be beneficial	
<p>Management of abacterial, chronic cystitis</p> <p>Role of local antibiotic policies in promoting <i>C. Difficile</i> in hospital and community environment</p> <p>Delayed antibiotic' strategy for UTI.</p> <p>How to manage the symptoms of a woman, who has had 3 days of Trimethoprim (or Nitrofurantoin) and remains symptomatic. Should the patient suffer symptoms until we get the sensitivity result? Or do we use the other empirical agent? Or co-amoxiclav?</p>	
3(b) Please list any sections of the guideline that are no longer required	
Specific antibiotic recommendations	
4 Please tick your preferred option for reviewing this guideline	
a. there is no new evidence that will affect existing recommendations and the guideline should not be reviewed at this time	
b. some recommendations will change in the light of the new evidence and elements of the guideline should be reviewed	✓

5 SIGN COUNCIL			Date: 11/11/2011
Revalidate	Refresh	Revise	Remove
	✓		