

Taddle Creek

MEDICAL DIRECTIVE

Family Health Team

Title:	Uncomplicated Urinary Tract Infection	Number:	TCFHT-MD07
Activation Date:	18-September-2011	Review Date:	24-August-2017
Next Review Date:	24-August-2018		

Sponsoring/Contact Person(s)
(name, position, contact particulars):

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790 Bay Street, Suite 522
Toronto, Ontario M5G 1N8
416-591-1222

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Toronto, Ontario M5G 1N8
416-591-1222

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790 Bay Street, Suite 306,
Toronto, Ontario M5G 1N8
416-260-1315 x 307

Order and/or Delegated Procedure:	Appendix Attached: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Title:
Using this directive, the implementer is able to assess, diagnose and treat uncomplicated urinary tract infections (UTIs) during in-person patient encounters.	
Recipient Patients:	Appendix Attached: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Title: Appendix A – Authorizer Approval Form
Recipients must: <ul style="list-style-type: none">• Be active patients of a TCFHT primary care provider who has approved this directive by signing the Authorizer Approval Form• Be female• Meet the conditions identified in this directive	
Authorized Implementers:	Appendix Attached: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Title: Appendix B – Implementer Approval Form

Implementers must be TCFHT-employed Regulated Health Care Providers or Physician Assistant (under the supervision of a physician).

Implementers must complete the following preparation and sign the Implementer Approval Form:

- Assess own knowledge, skill and judgment to competently assess, diagnose and treat uncomplicated urinary tract infections
- Review “Acute uncomplicated cystitis and pyelonephritis in women” from UpToDate, accessible from https://www.uptodate.com/contents/acute-uncomplicated-cystitis-and-pyelonephritis-in-women?source=search_result&search=acute%20uncomplicated%20cystitis&selectedTitle=1~80
- Review guidelines for collecting a clean catch (midstream) urine specimen, accessible from <https://medlineplus.gov/ency/article/007487.htm>
- Obtain most recent edition of “Anti-infective Guidelines for Community-acquired Infections” (Anti-Infective Review Panel, 2013) and review the Acute Urinary Tract Infection – Female: Uncomplicated section. Can be purchased from <https://www.mumshealth.com/guidelines-tools/anti-infective>
- Review mechanisms of action of recommended antibiotics in pharmacology reference textbook and/or Compendium of Pharmaceuticals and Specialties (CPS)
- An authorizing Primary Care Provider must supervise 3 cases

Indications:

Appendix Attached: No Yes
Title:

- Adult female patients presenting with 1 or more of the following: dysuria, frequency, urgency, cloudy or strong smelling urine, suprapubic pain or pressure, and/or low back pain
- Midstream urine specimen reveals presence of leukocytes (more than trace amount) or presence of nitrites (any positive, including trace amount) on testing with chemical reagent strip
- Temperature < 38.0°C without antipyretics

Contraindications:

- Male, pediatric, pregnant, postmenopausal patients, patients with diabetes and/or severe or complex medical issues
- Temperature > 38.0°C, vomiting or presence of costovertebral angle tenderness
- Patient has a history of urinary calculus
- Patient has a history of frequent UTIs (> 3 in the last year)

For patients presenting with the above contraindications, the implementer obtains history, performs a physical assessment, documents findings, and consults with the primary care provider in a timely manner for further direction on patient care

Consent:

Appendix Attached: No Yes
Title:

- Patient’s consent is implied for implementer to assess and treat uncomplicated UTI, as patient has presented seeking treatment and is a Family Health Team patient where interprofessional practice is expected

- Patient informed of purpose of testing, including when results will be available, and that follow up required if test is positive or negative
- Patient is able to give informed consent and is cooperative
- Patient is informed of the importance of up-to-date contact information in the event of positive results

Guidelines for Implementing the Order/Procedure:

Appendix Attached: ___ No X Yes

Title: Appendix C – Sample Lab Requisition
Appendix D – Sample Prescription

For assessment and treatment of patients who meet the **Indications** described above:

- Implementer performs assessment including:
 - History (presenting symptoms; urine characteristics; LMP to confirm the patient is not pregnant; past history of UTI and treatment; allergies to antibiotics)
 - Assessment bilaterally for costovertebral angle tenderness to rule out pyelonephritis
 - Temperature
- Implementer obtains a midstream urine sample and applies patient label to specimen bottle. Urine specimen should then be tested with chemical reagent strip using aseptic technique.
- Assess urine characteristics with the sample provided
- If midstream urine specimen reveals presence of leukocytes (more than trace amount) or presence of nitrites (any positive, including trace amount), implementer communicates with patient that she likely has a UTI
- Implementer documents the assessment in the EMR using the TCFHT-MD07 stamp
- Implementer prepares lab requisition for urinalysis and culture & sensitivities using the supervising primary care provider initials in Practice Solutions
- Lab requisition should be signed as below:
 - Signature
 - Implementer Name/Primary Care Provider Name (Medical Directive TCFHT-MD07)
- Implementer prepares prescription using the supervising primary care provider initials in Practice Solutions
- Prescription should be signed as below:
 - Signature
 - Implementer Name/Primary Care Provider Name (Medical Directive TCFHT-MD07)
- Implementer provides patient with education about common side effects of the antibiotic prescribed, when to expect resolution of symptoms, when to seek further medical assistance, and prevention of future UTIs (frequent voiding, increasing fluid consumption, perineal hygiene, voiding after sexual activity, and potential benefits of pure cranberry juice (Jepson & Craig, 2012)).
- Implementer to follow up with lab results promptly when available and review with the patient's primary care provider

Documentation and Communication:

Appendix Attached: ___ No X Yes

Title: Appendix E – TCFHT-MD07-
Uncomplicated_Urinary_Tract_Infection Stamp

- Documentation in the patient's EMR needs to include: name and number of the directive and name of the implementer (including credential) using the following PS Stamp: TCFHT-MD07_Uncomplicated_Urinary_Tract_Infection
- Information regarding implementation of the procedure and the patient's response should be documented in the patient's EMR in accordance with standard documentation practice (College of Nurses, 2008).
- Standard documentation is recommended for prescriptions, requisitions and requests for consultation
- Implementer will send a message in Practice Solutions to patient's primary care provider, notifying him/her that patient was seen and to review note in EMR for details

Review and Quality Monitoring Guidelines:

Appendix Attached: No Yes
 Title:

- Routine review will occur annually on the anniversary of the activation date. Review will involve a collaboration between the authorizing primary care providers and the authorized implementers.
- At any such time that issues related to the use of this directive are identified, TCFHT must act upon the concerns and immediately undertake a review of the directive by the authorizing primary care providers and the authorized implementers.
- This medical directive can be placed on hold if routine review processes are not completed or if indicated for an ad hoc review. During the hold, implementers cannot perform the procedures under authority of the directive and must obtain direct, patient-specific orders for the procedure until it is renewed.
- If new information becomes available between routine reviews, such as the publishing of new "Anti-infective Guidelines for Community-acquired Infections", and particularly if this new information has implications for unexpected outcomes, the directive will be reviewed by the authorizing physician/nurse practitioner and a minimum of one implementer.

References:

Anti-infective Review Panel. (2013). *Anti-infective Guideline for Community-acquired Infections*. Toronto: MUMS Guideline Clearinghouse.

College of Nurses of Ontario. (2008). *Practice Standard: Documentation*. Retrieved from http://www.cno.org/Global/docs/prac/41001_documentation.pdf

Gupta et al. (2011). International Clinical Practice Guidelines for the Treatment of Acute Uncomplicated Cystitis and Pyelonephritis in Women: A 2010 Update by the Infectious Diseases Society of America and the European Society for Microbiology and Infectious Diseases. *Clinical Infectious Disease*, 52, e103-120.

MedLine Plus. (2016). *Clean catch urine sample*. Retrieved from <https://medlineplus.gov/ency/article/007487.htm>

Hooton, T., & Gupta, K. (2016). *Acute Uncomplicated Cystitis and Pyelonephritis in Women*. Retrieved from https://www.uptodate.com/contents/acute-uncomplicated-cystitis-and-pyelonephritis-in-women?source=search_result&search=acute%20uncomplicated%20cystitis&selectedTitle=1~80

Jepson, RG., & Craig, JC. (2012). Cranberries for preventing urinary tract infections. *Cochrane Database Systematic Reviews*, Oct 17; (1):CD001321.

Wagenlehner, F., Weidner, W., & Naber, K. (2009). An update on uncomplicated urinary tract infections in women. *Current Opinion in Urology*, 2009(19), 368-374.

NOTE:

This medical directive is based on TCFHT's previous medical directive RN-1UTI entitled, "Assessment, Diagnosis, and Treatment of Uncomplicated Urinary Tract Infections (UTI)," which required revision in formatting to reflect the growth of the TCFHT organization. The majority of the content of RN-1UTI has remained the same for the revised TCFHT-MD07 version. Therefore, all approved Implementers and Authorizers for medical directive RN-1UTI "Assessment, Diagnosis, and Treatment of Uncomplicated Urinary Tract Infections (UTI)" have grandfathered approval for TCFHT-MD07 "Uncomplicated Urinary Tract Infection."

Appendix A:

Authorizer Approval Form

Name	Signature	Date
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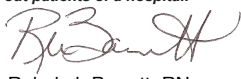
Appendix B:
Implementer Approval Form

To be signed when the implementer has completed the required preparation, and feel they have the knowledge, skill, and judgement to competently carry out the actions outlined in this directive.

Name	Signature	Date
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Appendix C:

Sample Lab Requisition

 Ontario Ministry of Health and Long-Term Care Laboratory Requisition Requisitioning Clinician / Practitioner		Laboratory Use Only			
Name Alissia Valentinis Address 790 Bay Street, Suite 522, Box 58/59, Toronto, Ontario, M5G 1N8		Clinician/Practitioner's Contact Number for Urgent Results (416) 591-1222 Ext.		Service Date yyyy mm dd	
Clinician/Practitioner Number 018613	CPSO / Registration No.	Health Number ON 1112 223 456	Version	Sex <input checked="" type="checkbox"/> M <input type="checkbox"/> F	Date of Birth yyyy mm dd 1930 10 11
Check (✓) one: <input checked="" type="checkbox"/> OHIP/Insured <input type="checkbox"/> Third Party / Uninsured <input type="checkbox"/> WSIB		Province / Other Provincial Registration Number		Patient's Telephone Contact Number 416 555-5555	
Additional Clinical Information (e.g. diagnosis)		Patient's Last Name (as per OHIP Card) Duck Patient's First & Middle Names (as per OHIP Card) Donald			
<input type="checkbox"/> Copy to: Clinician/Practitioner Last Name: First Name		Patient's Address (including Postal Code) 187 Bay Street Toronto, ON N4N 5J5			
Address					
Note: Separate requisitions are required for cytology, histology / pathology and tests performed by Public Health Laboratory					
<input checked="" type="checkbox"/>	Biochemistry	<input checked="" type="checkbox"/>	Hematology	<input checked="" type="checkbox"/>	Viral Hepatitis (check one only)
	Glucose <input type="checkbox"/> Random <input type="checkbox"/> Fasting		CBC		Acute Hepatitis
	HbA1C		Prothrombin Time (INR)		Chronic Hepatitis
	Creatinine (eGFR)		Immunology		Immune Status / Previous Exposure Specify: <input type="checkbox"/> Hepatitis A
	Uric Acid		Pregnancy Test (Urine)		<input type="checkbox"/> Hepatitis B
	Sodium		Mononucleosis Screen		<input type="checkbox"/> Hepatitis C
	Potassium		Rubella		or order individual hepatitis tests in the "Other Tests" section below
	Chloride		Prenatal: ABO, RhD, Antibody Screen (titre and ident. if positive)		Prostate Specific Antigen (PSA)
	CK		Repeat Prenatal Antibodies		<input type="checkbox"/> Total PSA <input type="checkbox"/> Free PSA
	ALT		Microbiology ID & Sensitivities (if warranted)		Specify one below: <input type="checkbox"/> Insured – Meets OHIP eligibility criteria
	Alk. Phosphatase		Cervical		<input type="checkbox"/> Uninsured – Screening; Patient responsible for payment
	Bilirubin		Vaginal		Vitamin D (25-Hydroxy)
	Albumin		Vaginal / Rectal – Group B Strep		<input type="checkbox"/> Insured - Meets OHIP eligibility criteria: osteopenia; osteoporosis; rickets; renal disease; malabsorption syndromes; medications affecting vitamin D metabolism
	Lipid Assessment (includes Cholesterol, HDL-C, Triglycerides, calculated LDL-C & Chol/HDL-C ratio; individual lipid tests may be ordered in the "Other Tests" section of this form)		Chlamydia (specify source):		<input type="checkbox"/> Uninsured - Patient responsible for payment
	Albumin / Creatinine Ratio, Urine		GC (specify source):		
<input checked="" type="checkbox"/>	Urinalysis (Chemical)		Sputum		Other Tests - one test per line
	Neonatal Bilirubin:		Throat		
	Child's Age: days hours		Wound (specify source):		
	Clinician/Practitioner's tel. no.		Urine		
	Patient's 24 hr telephone no.	<input checked="" type="checkbox"/>	Stool Culture		
	Therapeutic Drug Monitoring:		Stool Ova & Parasites		
	Name of Drug #1		Other Swabs / Pus (specify source):		
	Name of Drug #2				
	Time Collected #1 hr. #2 hr.		Specimen Collection		
	Time of Last Dose #1 hr. #2 hr.		Time Date		
	Time of Next Dose #1 hr. #2 hr.				
I hereby certify the tests ordered are not for registered in or out patients of a hospital.  Rebekah Barrett, RN Medical Directive TCFHT-MD07		Fecal Occult Blood Test (FOBT) (check one) <input type="checkbox"/> FOBT (non CCC) <input type="checkbox"/> ColonCancerCheck FOBT (CCC) no other test can be ordered on this form			
Clinician/Practitioner Signature Date 09/04/2014		Laboratory Use Only			

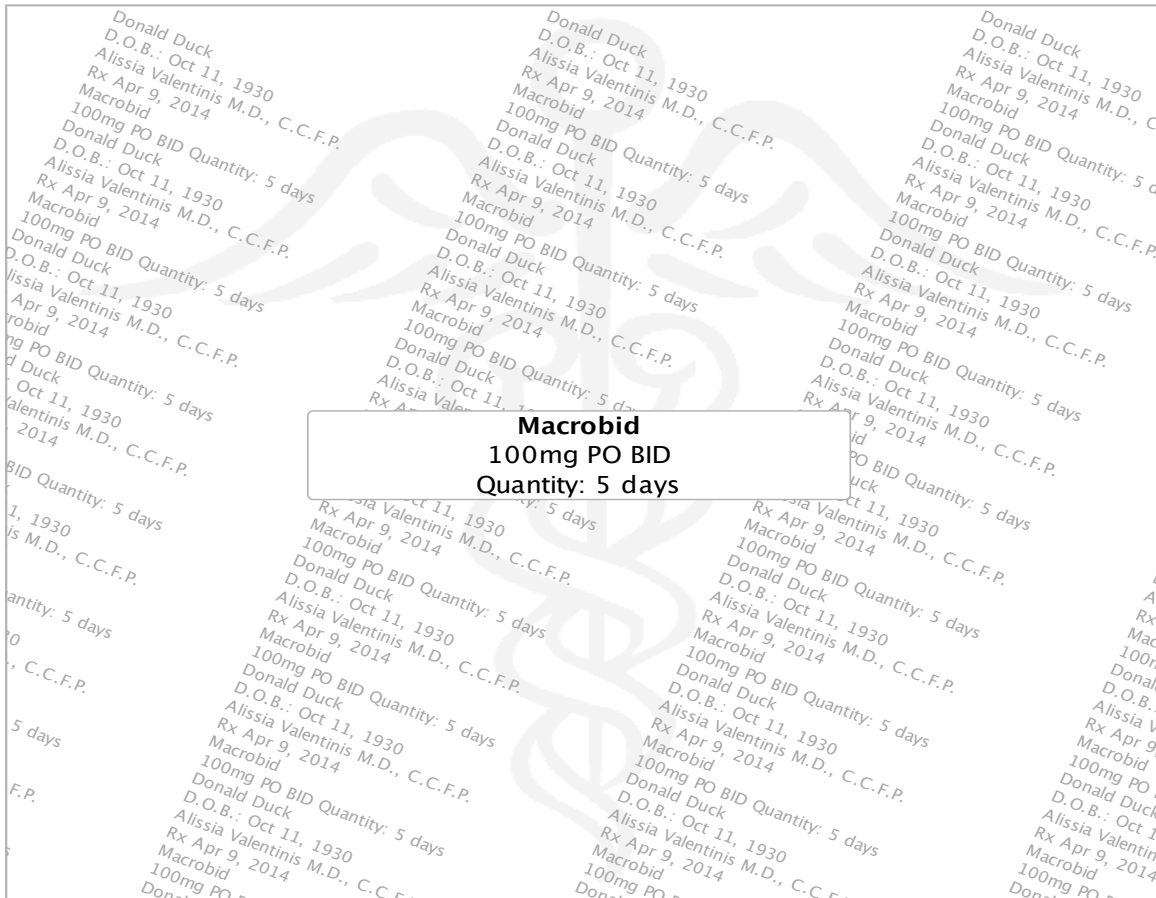
Appendix D:

Sample Prescription

Alissia Valentinis M.D., C.C.F.P.
CPSO #79090
790 Bay Street
Suite 522, Box 58/59
Toronto, Ontario M5G 1N8
Tel: 416-591-1222 Fax: 416-591-1227

Rx For: Donald Duck
187 Bay Street
Toronto, ON
N4N 5J5
DOB: Oct 11, 1930 M
416-555-5555 (H)

Apr 9, 2014



Donald Duck
D.O.B.: Oct 11, 1930
Alissia Valentinis M.D., C.C.F.P.
Rx Apr 9, 2014
Macrobid
100mg PO BID Quantity: 5 days
Rebekah Barrett
Rebekah Barrett, RN
Medical Directive TCFHT-MD07
100mg PO BID Quantity: 5 days

Professional ID:

Alissia Valentinis M.D., C.C.F.P.

Appendix E:**TCFHT-MD07_Uncomplicated_Urinary_Tract_Infection Stamp**

S:

- Hx of «dysuria,» «urinary frequency,» «urgency,» «suprapubic pain,» «cloudy urine,» «strong-smelling urine,» «hematuria» X • days
- No «fever,» «chills,» «vomiting,» «back pain»
- «- No vaginal itching or abnormal discharge»
- «- LMP: •»
- «- No hx of urinary calculus»
- «- • UTIs in the past year»
- «Confirmed NKDA» «Allergies to • noted»

O:

- T: •
- «No» «Positive» CVA tenderness
- Urine dip: • leuks, • nitrites, • protein, • blood
- Urine characteristics: «clear,» «cloudy,» «hematuria,» «foul smell»

A: «Symptoms consistent with UTI»

P:

- «- Urine sent to lab for C&S and urinalysis»
- «- Rx for • given»
- «- Reviewed methods of UTI prevention - proper perineal care, good hydration, not holding urine and voiding immediately after sexual activity; discussed benefits of cranberry juice.»
- RTC if symptoms persist or worsen, or if develops fever, chills, vomiting or back pain
- Advised to complete full course of abx, even if symptoms improve/resolve
- Provider to follow up with urine test results

*actions and interventions in accordance with Medical Directive TCFHT-MD07