

Assessment and Diagnostic Guideline: Gastrointestinal and Genitourinary System

Registered Nurses with **RN First Call** Certified Practice (RN(C)) designation are authorized to manage, diagnose, and/or treat the following genitourinary conditions:

- Uncomplicated urinary tract infection (Adult only)

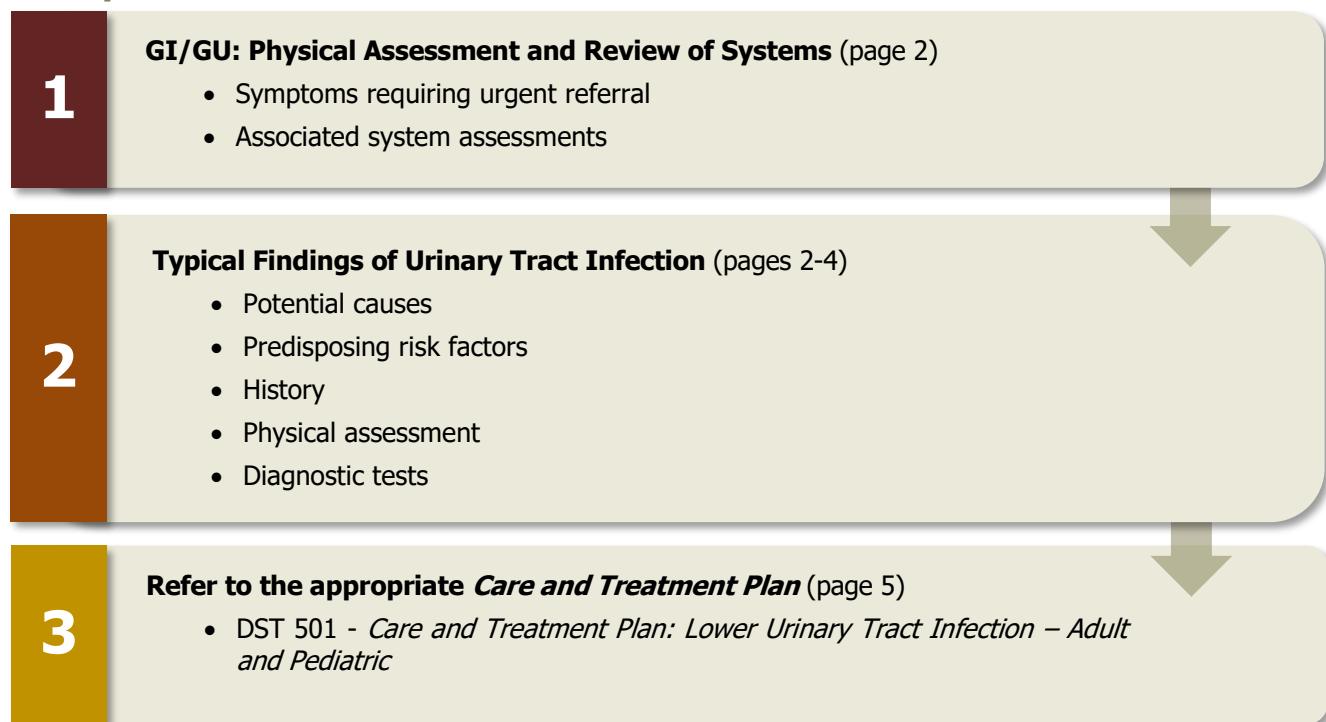
Registered Nurses with **Remote Nursing** Certified Practice (RN(C)) designation are authorized to manage, diagnose, and/or treat the following genitourinary conditions:

- Urinary tract infection (Adults & **2 years of age and older**)

This *Assessment and Diagnostic Guideline* provides guidance to RN(C)s when conducting assessments and diagnostic tests related to genitourinary conditions that can be managed and/or treated under the Certified Practice framework. RN(C)s maintain an RN scope of practice which is expanded in particular circumstances wherein the RN(C) is able to diagnose and treat conditions listed above.

RN(C)s must ensure that they complete and document their assessments according to regulatory practice standards and their practice setting requirements. Upon arriving at a diagnosis, RN(C)s should consult the relevant *Care and Treatment Plans* to inform the management and treatment of the condition.

Visual Summary of Guideline



1) Gastrointestinal and Genitourinary: Physical Assessment and Review of Systems

*Refer to the Assessment and Diagnostic Guideline: General as needed.

Symptoms Requiring Urgent Referral

The first step is to identify those GI/GU presentations that require urgent referral and those conditions that can be managed safely by an RN(C).

This *Assessment and Diagnostic Guideline* informs RN(C)s about the diseases, disorders, and conditions they are authorized to diagnose, treat and manage. Patients presenting with symptoms outside of what is provided in this document require referral to a physician or nurse practitioner

Associated Systems

Cardiovascular and Pulmonary Examination

- Cardiovascular and pulmonary exam should also be performed

Eyes, Ears, Nose, Throat

- Assess for pharyngitis and conjunctivitis (chlamydial infection, gonorrhea)
- Lymph nodes (auricular, tonsillar, submandibular, supraclavicular, infraclavicular)

Integumentary

- Assess for skin lesions, rashes, polyarthralgia of disseminated gonorrhea, and hydration status

Gastrointestinal and Genitourinary Review of System Questions

- See the *Assessment and Diagnostic Guideline: General* – 'Review of system: Gastrointestinal and Genitourinary' section if not already done.

2) Typical Findings

Lower Urinary Tract Infection (UTI)

Potential Causes

- Escherichia coli is the most common organism, found in 80-90% of cases
- Staphylococcus saprophyticus
- Other enterobacteria

Additional Pediatric Considerations

- Klebsiella
- Group B Streptococcus
- Proteus
- Staphylococcus epidermidis*
- Pseudomonas
- H. influenza*
- Enterococcus

Predisposing Risk Factors

- Female gender
- Sexual activity
- Previous UTIs
- Pregnancy
- Use of spermicides, diaphragm
- Infrequent voiding
- Dehydration
- Urinary instrumentation (catheterization)
- Renal calculi
- Immunocompromised (human immunodeficiency virus infection)
- Diabetes mellitus
- GU tract anomalies (congenital, urethral stricture, neurogenic bladder, tumour)
- Male-specific factors are anal intercourse, intercourse with a female with a UTI, lack of circumcision, and prostatic hypertrophy.

Additional Pediatric Considerations

- Gender: as or more common in boys as neonates
 - after the neonatal period, the incidence is higher in females
- Bowel and/or bladder dysfunction, such as infrequent voiding, constipation

History

- Urinary frequency
- Urinary urgency
- Dysuria
- Mild dehydration
- Afebrile
- Suprapubic discomfort
- Bladder spasm
- Foul-smelling urine
- Hematuria

Additional Pediatric Considerations

History for Neonates and Infants

- Non-specific, non-urinary symptoms
- May present with sepsis
- Fever
- Irritability
- Poor feeding
- Vomiting
- Diarrhea or constipation
- Jaundice

- Hypothermia
- Failure to thrive
- Decreased activity, lethargy

History for children less than 3 years old

- Abdominal pain
- Fever
- Vomiting
- New onset enuresis
- Strong smelling urine
- Urinary retention

History for children 3 years of age or older

- Enuresis
- Flank or back pain (upper UTI)
- Vomiting
- Fever

Physical Assessment

- Suprapubic tenderness may be mild to moderate
- If flank pain presents, refer or consult with a physician or nurse practitioner, as it suggests ascending infection
- If costovertebral angle (CVA) tenderness presents on percussion, refer or consult with a physician or nurse practitioner as suggests ascending infection

Additional Pediatric Considerations

- May or may not look ill
- Tender abdomen (may need to include reproductive assessment in adolescents)
- State of circumcision - male

Note: In the elderly, symptoms do not always follow the classic triad of urgency, frequency, and dysuria. Look for subtle cognitive changes and predisposing factors.

Sexually Active Female

- If appropriate, perform a pelvic exam and full STI screening if abnormal vaginal discharge or symptoms suggestive of vaginitis or STI are present
- If appropriate, offer STI screening (see diagnostic tests section below)

Note: a referral to a physician or nurse practitioner is required for a pelvic exam for any female who has not been sexually active or any female less than 14 years of age.

Sexually Active Male

- Assess for urethral symptoms, discharge, or genital lesions
- If present, offer full STI screening (see diagnostic tests section below)

Note: The RN(C) must be certified in STI management to carry out activities in the BC Centre for Disease Control (BCCDC) STI DSTs. If STI testing is warranted and the RN(C) is not STI certified, refer to a physician or nurse practitioner. If appropriate, offer STI screening (see diagnostic tests section below).

Diagnostic Tests

- Urinalysis
 - Dipstick test: blood, protein, nitrites, leukocytes
 - Consider microscopic urinalysis: white blood cells, red blood cells, bacteria
- Consider labs for renal function: creatinine, BUN, glomerular filtration rate
- Urine culture and sensitivity are generally not required for an uncomplicated UTI
- Collect a urine sample for culture and sensitivity prior to starting antibiotics if:
 - This is a complicated UTI
 - This is the second presentation of a UTI within a one-year time frame
 - Patient presents with treatment failure (persistent UTI symptoms up to 10 days post-treatment)
 - Patient presents with fever, chills, rigour, or flank pain (refer or consult a physician or nurse practitioner)
 - Dipstick urine test is negative, but symptoms are indicative of a UTI
- For complicated UTIs, ensure urine culture and sensitivity are tested 1-2 weeks after antibiotics are completed
- If symptoms or history indicate, offer full STI screening as per the appropriate STI DST, if STI-certified
- If full STI screening is declined, obtain a urine specimen for CT/GC NAAT
- If STI signs or symptoms are also present ensure follow-up as there may be more than one condition present (e.g., UTI and STI)
- Consider urine pregnancy test if indicated

Note: If urinary frequency, urgency or dysuria and dipstick is positive for leukocytes and/or nitrites, it may be treated as a lower UTI.

Note: If STI symptoms are also present, ensure follow-up, as there may be more than one condition present (e.g., UTI and STI).

3) Refer to the appropriate Care and Treatment Plan

Based on the differential diagnosis established with assessment and diagnostic tests above, proceed to the appropriate care and treatment plan:

- **DST 501 - Care and Treatment Plan: Lower Urinary Tract Infection – Adult and Pediatric**

References

More recent editions of any of the items in the References List may have been published since this DST was published. If you have a newer version, please use it.

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