

MEMORANDUM

TO : Physicians, Nurse Practitioners, Nurse Managers, Directors
Of Nursing, Clinical Instructors/Educators, PEI Hospital
Laboratories, PEI Nursing Homes

FROM : Dr. Marvin Tesch
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DATE : July 9, 2013

RE : **Thyroid Function Tests: Diagnosis & Monitoring of Thyroid
Function Disorders in Non-hospitalized Adults**

Scope:

- The detection of thyroid dysfunction in adults (individuals 19 years of age and over) without known or suspected pituitary disease.
- Monitoring adult patients treated for thyroid function disorders.

Routine thyroid function testing is not recommended in asymptomatic adults. However, testing may be indicated when non-specific signs and symptoms are present in patients at risk for thyroid disease.

Risk factors for thyroid disease

- Personal history of thyroid disease
- Strong family history of thyroid disease
- Diagnosis of autoimmune disease
- Drug therapies such as lithium and amiodarone
- Women 6 weeks to 6 months post-partum
- Past history of neck irradiation
- Women over age 50
- Elderly patients

Ordering Thyroid Tests:

Measurement of TSH has become the principal test for evaluation of thyroid function in most circumstances.

TSH Diagnostic

- The attached algorithm is being reinstated for use with non-hospitalized adult patients without known or suspected pituitary disease.
- Begin evaluation by requesting "**TSH Diagnostic**" on the Health PEI Laboratory Blood Test Request Form.
- This test utilizes the attached algorithm to efficiently evaluate and monitor functional thyroid status.



- Subsequent tests (FT4, FT3, and anti-TPO) will be automatically performed if the TSH value meets the criteria outlined on the algorithm.

TSH Monitoring Therapy

- On the requisition choose “**TSH Monitoring Therapy**” – please specify treatment.
- TSH values change slowly, frequent repeat testing is unnecessary.
- Repeat TSH after at least 8 weeks following a change in thyroid hormone replacement dose
- Once the TSH has normalized with treatment, it should be checked annually unless clinically indicated.
- To monitor patients treated for hyperthyroidism, allow at least three months before repeating TSH levels. If a biochemical measurement of thyroid status is required during this time period, FT4 is preferred.
- Should FT4, FT3 and/or anti-TPO testing be clinically indicated please indicate request on the Laboratory Blood Test Request Form under “Other”.

For further information, please contact:

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Attachment: **Thyroid Testing Algorithm:** Laboratory Medicine Program. Health PEI
June 2013.

References:

Toward Optimized Practice Clinical Practice Guideline Working Group. Clinical Practice Guideline: Investigation and Management of Primary Thyroid Dysfunction. Toward Optimized Practice Program, Edmonton: AB 2008

Dufour D. Laboratory Tests of Thyroid Function: Uses and limitations. Endocrinol Metab Clin N Am. 2007;36:579-594.

Guidelines & Protocols Advisory Committee. Thyroid Function Tests: Diagnoses and Monitoring of Thyroid Function Disorders in Adults. January 1, 2010

Mayo Medical Laboratories. THSCM/83663 Overview: Thyroid Function Cascade, Serum
<http://www.mayomedicallaboratories.com/test-catalog/print/83633>

THYROID TESTING ALGORITHM

Non-hospitalized patients (> 19 years of age) without known or suspected pituitary disease

July 2013

Begin evaluation by requesting TSH - Diagnostic

