CLINICAL PRACTICE CHANGE

LABORATORY DIAGNOSTICS - PRE-ANALYTICS

New Thyroid Testing Guidelines

March 12, 2021

Date effective: Immediately

Background Information:

Shared Health Diagnostic Services (Lab), the Sections of Endocrinology and Metabolism and Pediatric Endocrinology, have collaborated on a quality improvement initiative to standardize endocrine testing based on indications endorsed by Choosing Wisely Manitoba and implement Thyroid Reflex Testing within Shared Health Laboratories.

Clinical Practice Change:

This has culminated in the development of a Provincial Endocrine Testing Guideline (see references below for link)

- The diagnosis of thyroid disease in the population (non-hospitalized individuals with intact Hypothalamic-Pituitary-Thyroid Axis) is best done using TSH.
- When it is abnormal, appropriate reflex to either Free T4 or/and Free T3 would provide clarity of the nature of the thyroid disease (subclinical or over hypo-or-hyperthyroidism).
- Thyroid Reflex Testing has been implemented:
 - Thyroid reflex testing is automated
 - Abnormal TSH will reflex Free T4/ Free T3 as appropriate.
 - Free T4 will be performed when TSH < 0.40 mU/L and ≥ 4.3 mU/L.
 - Free T3 will be performed when TSH < 0.09 mU/L.</p>
 - Dynacare has also implemented reflex testing.
 - Free T3 and Free T4 have been removed from the standard requisitions as they should not be ordered separately

References/Resources:

https://sharedhealthmb.ca/health-providers/diagnostic/clinical-practice-changes

Patient Impact: Improve appropriateness of thyroid investigations.

System Improvements:

- Reduce unnecessary testing by providing reflex testing
- Provide guidance document on appropriate Thyroid testing

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