

Appropriate Use of Laboratory Tests –
Serum Urea Testing
English summary

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SUMMARY

Appropriate Use of Laboratory Tests – Serum Urea Testing

Introduction

Serum urea testing raises several issues regarding appropriateness, particularly because the test has lower sensitivity than creatinine measurement for detecting renal insufficiency. In addition, serum urea testing is often ordered routinely at the same time as creatinine and electrolyte tests. The objective of this work is to develop a guidance sheet on appropriate use in order to reduce the volume of low-value procedures within Quebec's healthcare system.

Methodology

A review of the literature on indications and recommendations related to serum urea testing was conducted using INESSS's rapid review methodology. Healthcare professionals provided experiential and contextual knowledge specific to Québec.

Results

After the analysis of the information gathered and an iterative process with stakeholders, the following non-indications and indications were formulated:

Serum urea testing **is not indicated**:

- for the initial assessment of renal function;
- in the absence of a specific diagnostic suspicion in stable patients, including hospitalized patients.

Serum urea testing **may be indicated, as part of specialized follow-up**:

- in persons with advanced chronic kidney disease (stage 3 or higher), to further evaluate renal dysfunction characterized by elevated creatinine;
- when creatinine may not adequately reflect renal function (e.g. sarcopenia, cirrhosis, use of drugs inhibiting creatinine secretion).

Conclusion

The guidance sheet that was developed aims to mobilize, guide, and equip healthcare professionals to encourage more appropriate use of serum urea testing. It may thus contribute to reduce the number of annual test requests and associated costs and workload, while also generating a positive environmental impact.

**Institut national
d'excellence en santé
et en services sociaux**

Québec



Siège social

2535, boulevard Laurier, 5^e étage
Québec (Québec) G1V 4M3
418 643-1339

Bureau de Montréal

2021, avenue Union, 12^e étage, bureau 1200
Montréal (Québec) H3A 2S9
514 873-2563

inesss.qc.ca

