

Focus the system
on a common
quality agenda

Catalyze
Spread

Build
Evidence &
Knowledge

Broker
Improvement

Evaluate
Progress

Health Quality Ontario: Optimizing the Utilization of Laboratory Tests

Leslie Levin MD, FRCP (Lon), FRCPC

Vice President

Evidence Development and Standards,
Health Quality Ontario

Chief Scientific Officer, MaRS EXCITE

Laura Park-Wyllie PharmD, PhD

Manager, Implementation Planning, Funding & Standards

Evidence Development and Standards

Health Quality Ontario



Laboratory tests are examined as part of Health Quality Ontario's 'Appropriateness' Initiative

Appropriateness Initiative

- Increasing recognition that inappropriate care: defined as overuse, underuse and misuse of health care, is widespread and associated with high costs to the health system.
- To prioritize and support the appropriate use of health care interventions in Ontario, Health Quality Ontario (HQO) formed the Appropriateness Working Group as a subcommittee of the Ontario Health Technology Advisory Committee (OHTAC) in April 2012.

Appropriateness Working Group of OHTAC

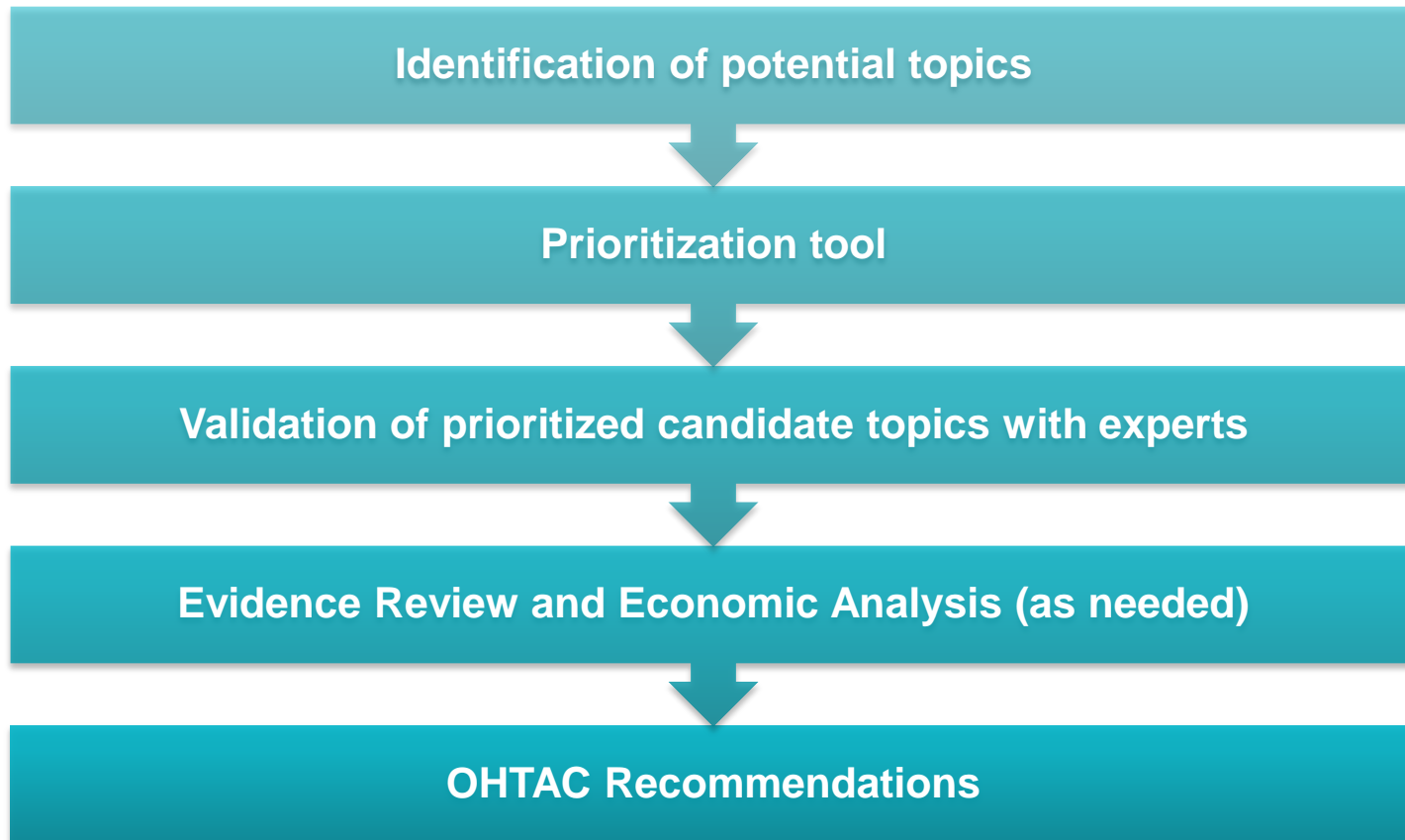
Appropriateness Working Group of OHTAC

- Assists OHTAC by identifying, prioritizing, and assessing interventions where there is potential for improved appropriate use.
- ~20 members including Ontario Medical Association (OMA), the Ontario Hospital Association (OHA), the Council of Academic Hospitals of Ontario (CAHO), Ontario College of Family Physicians (OCFP), Local Health Integration Network (LHIN), academic, senior health administrators, and the Ministry of Health and Long-Term Care.
- Reports to OHTAC.

OHTAC

- A health technology assessment body that makes recommendations about health interventions in Ontario, and serves as a standing advisory subcommittee of HQO's Board of Directors.

Laboratory test topics are considered through HQO/OHTAC's Appropriateness Framework



Laboratory topics were considered against 10 Prioritization Criteria

OHTAC Appropriateness Working Group Prioritization Tool

- Disease burden
- Rate of diffusion
- Volume
- Cost Burden
- Comparative Effectiveness
- Safety Concerns – Current Use
- Safety Concerns – Delisting
- Societal / Ethical
- Alignment
- Feasibility of Implementation

Laboratory tests selected for further examination to improve appropriate utilization

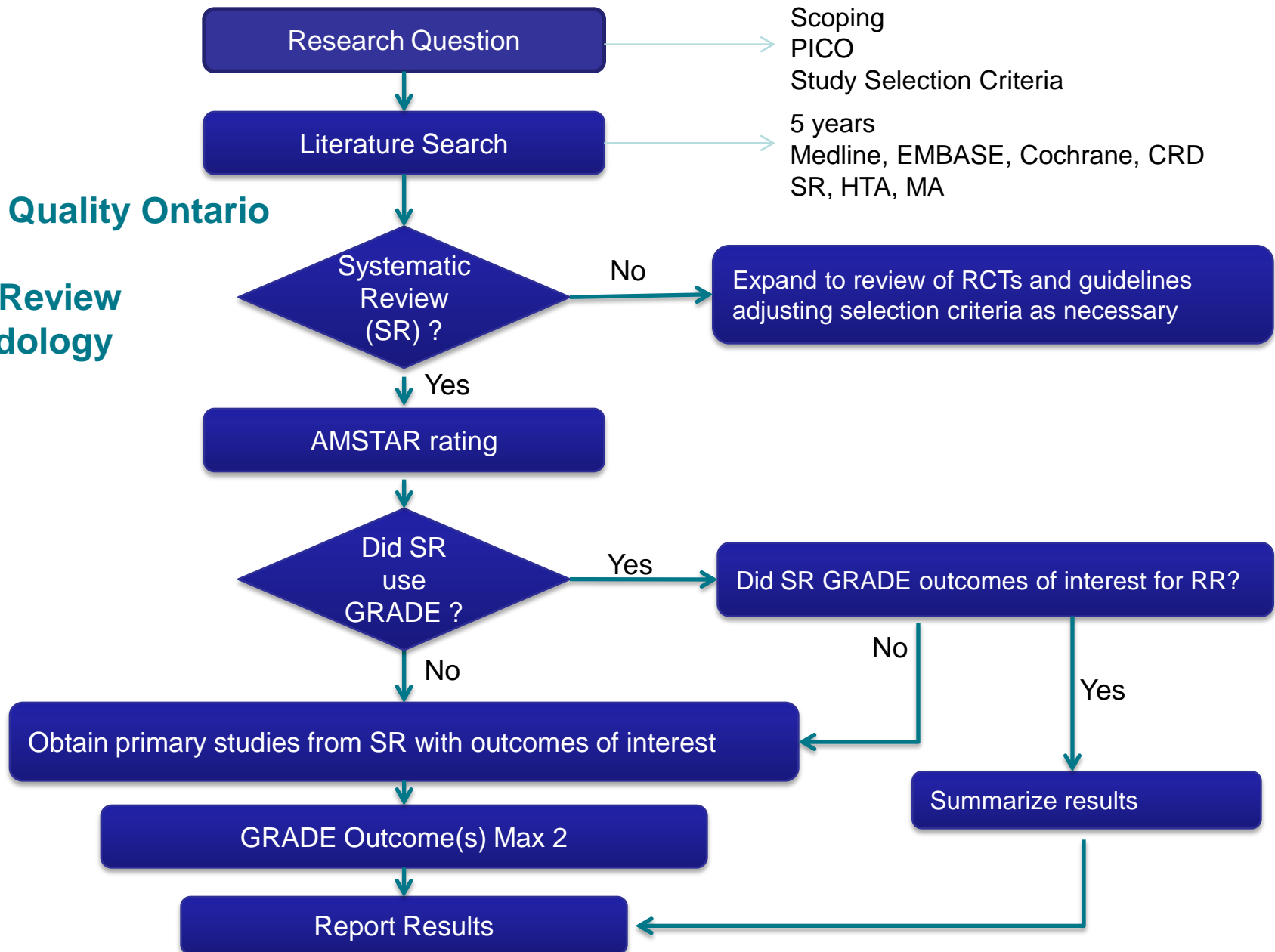
- Creatine Kinase
- Ferritin
- Vitamin B12
- Folate
- Liver Function (AST)
- Chloride

Considerations for Role of Evidence when examining Laboratory test utilization

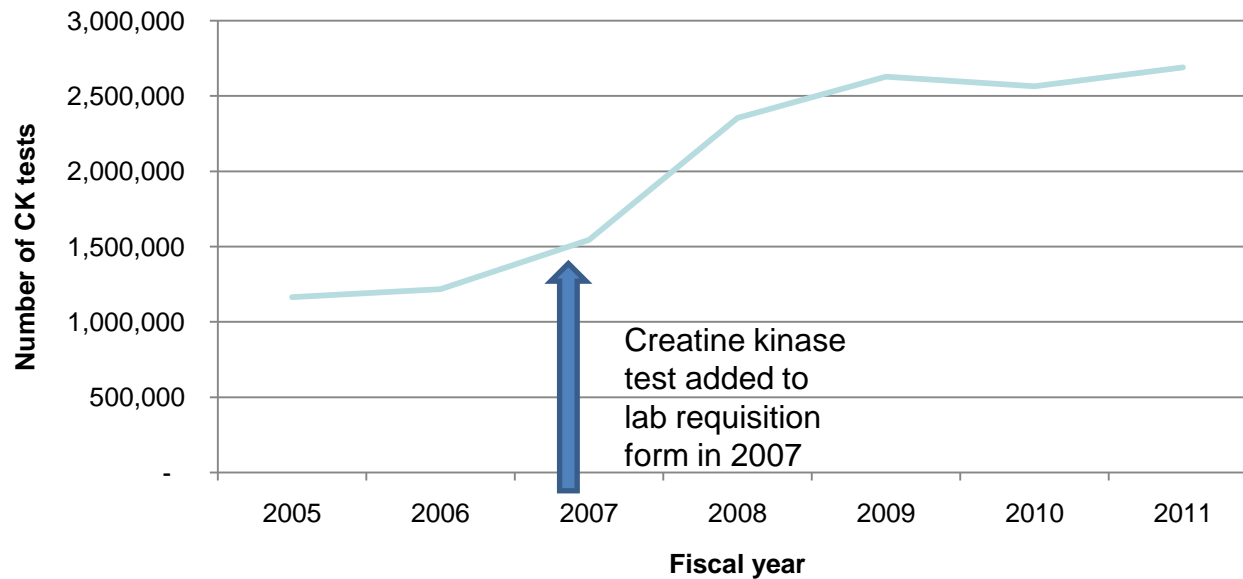
- Body of evidence: A relatively smaller body of published scientific literature generally available to support evidence reviews of lab tests
- Type of Evidence Review: Health Quality Ontario Rapid Review
- Review Ontario utilization data
- Contextualize evidence with Expert Consultation
- OHTAC review and draft OHTAC Recommendation
- OHTAC Public Consultation Process
- Final OHTAC Recommendation submitted to Board of Health Quality Ontario

Health Quality Ontario

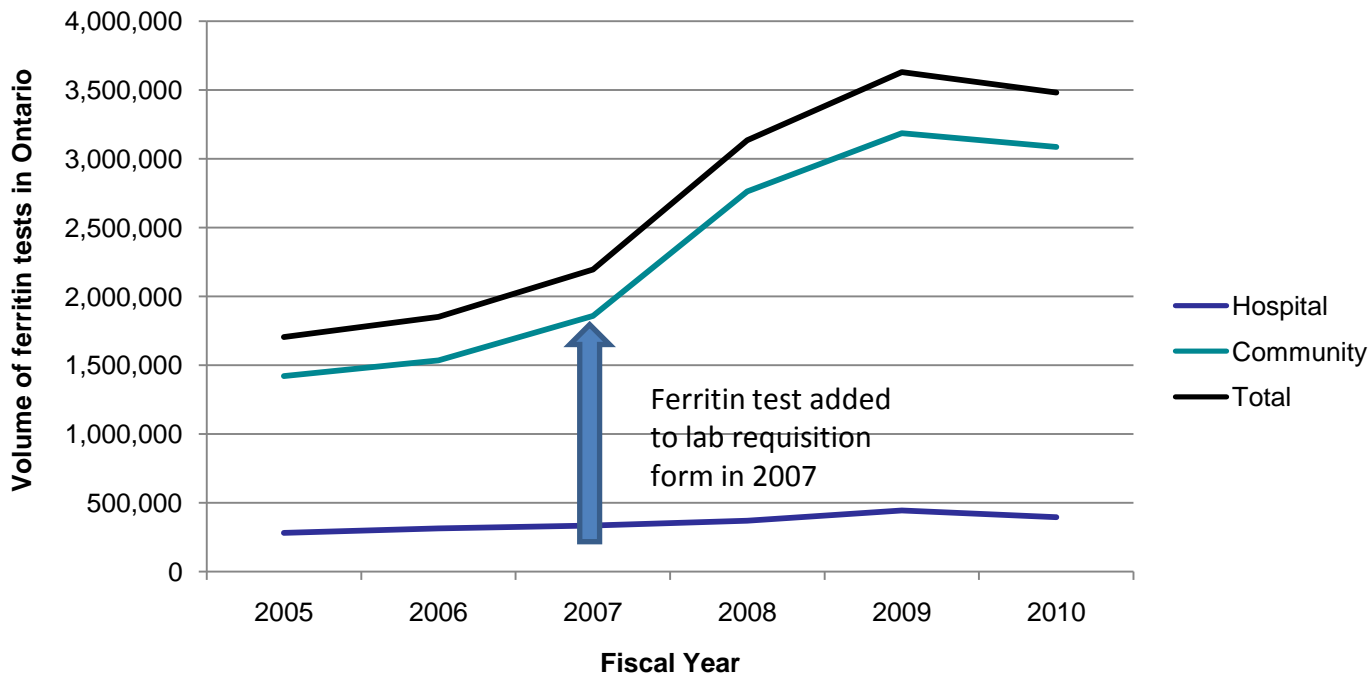
Rapid Review Methodology



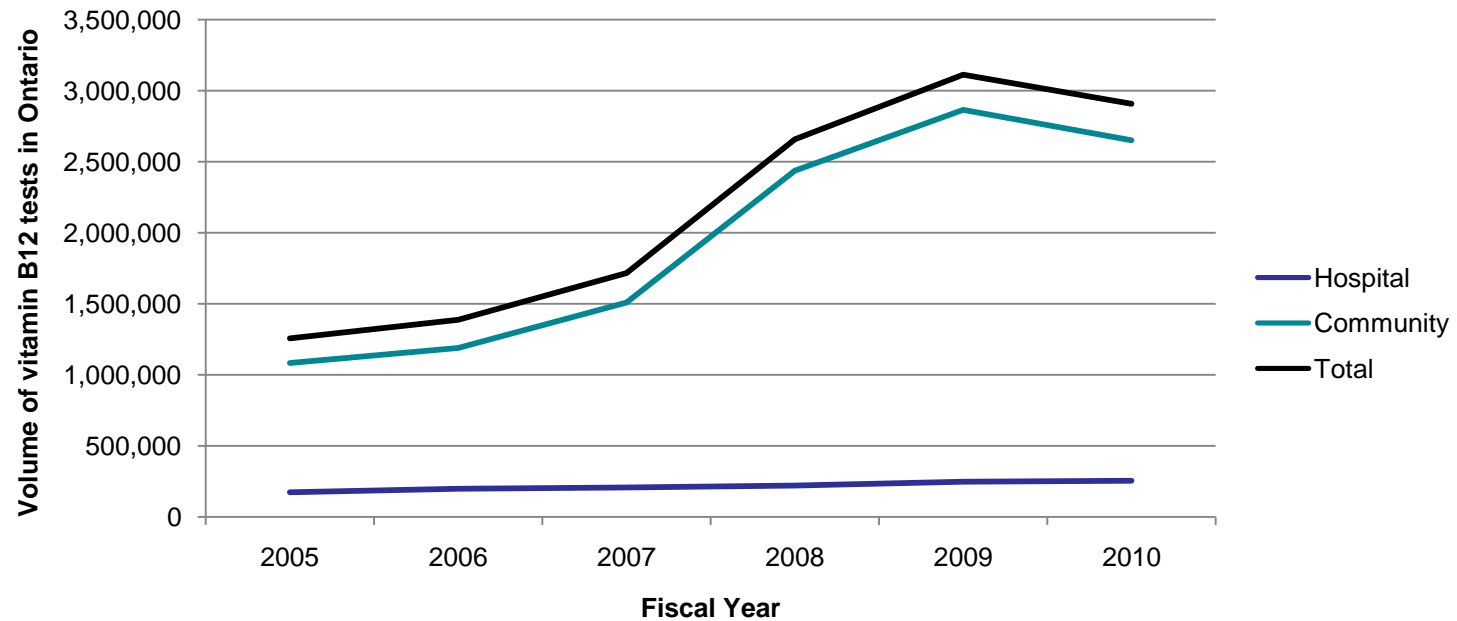
Creatine kinase (CK) testing in Ontario



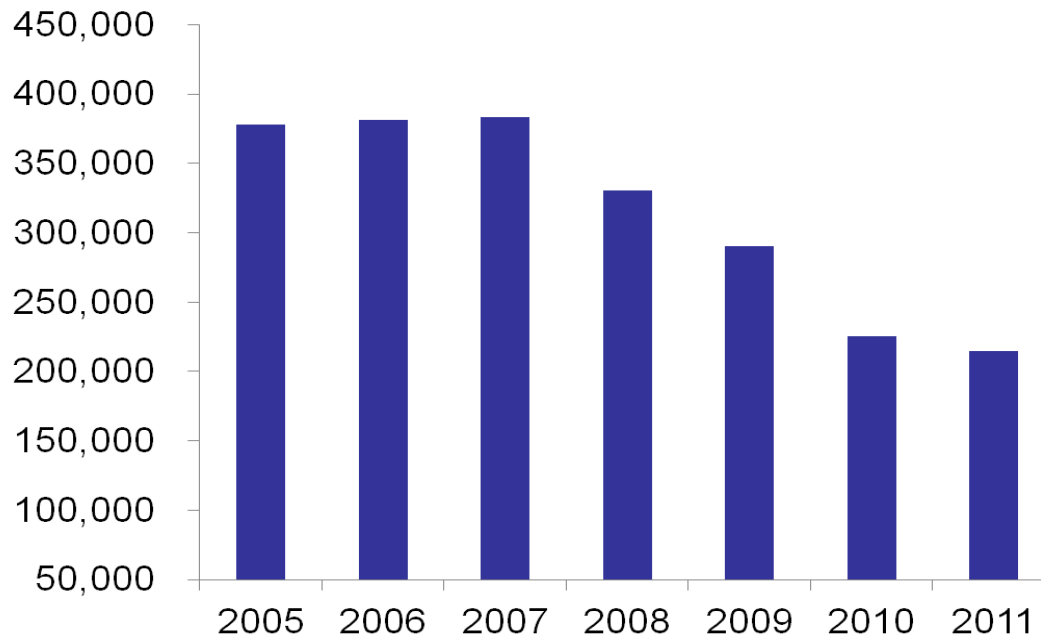
Ferritin Testing in Ontario



Vitamin B12 Testing in Ontario



Folate Community Lab Testing in Ontario



Years

Liver Function Tests – AST & ALT

Fiscal Year	Community Laboratory Volumes	
	SGOT (AST)	SGPT (ALT)
2011/2012*	2,162,042	5,833,321
2010/2011	2,216,747	5,567,848
2009/2010	2,326,974	5,527,814
2008/2009	2,511,450	4,926,390
2007/2008	4,272,413	2,939,167
2006/2007	4,826,475	2,154,538
2005/2006	4,711,135	2,029,553

*M3 projected to M7

Chloride Testing in Ontario

Fiscal Year	Community Lab Volumes
2011/2012*	4,297,147
2010/2011	4,095,207
2009/2010	4,136,870
2008/2009	3,933,021
2007/2008	3,623,732
2006/2007	3,420,510
2005/2006	3,268,050

*M3 projected to M7

Evidence → Consultation → OHTAC Recommendation

Topic	Evidence Review	Expert Panel	Draft OHTAC Recommendation
Creatine Kinase	Rapid Review	✓	Remove from laboratory requisition
Ferritin	Rapid Review	✓	Remove from laboratory requisition Add to antenatal form 1 Restrict ferritin testing to certain indications
Vitamin B12	Rapid Review Evidence-based Analysis	✓✓	Remove from laboratory requisition
Folate	Expert Consultation	✓	Restrict folate testing to certain indications Red blood cell folate should be used
AST	Expert Consultation	-	Restrict to specialized physicians
Chloride	Expert Consultation	-	Remove from laboratory requisition

Ministry Actions

Topic	Implementation <i>(Ministry is monitoring volumes)</i>
Creatine Kinase January 2013	Remove from laboratory requisition Available as OHIP-insured with written request in the “Other Tests” section of form
Ferritin November 2012	Removed from laboratory requisition form Available as OHIP-insured with written request in the “Other Tests” section of form
Vitamin B12 November 2012	Removed from laboratory requisition form Available as OHIP-insured with written request in the “Other Tests” section of form
Folate January 2013	Serum folate is only insured when ordered by physician with expertise in hematological or gastrointestinal disorders Red Blood Cell is insured for subset of patients
AST January 2013	AST is only insured when ordered by physician with expertise in hepatic disorders.
Chloride January 2013	Remove from laboratory requisition Available as OHIP-insured with written request in the “Other Tests” section of form

Acknowledgements

Kristen McMartin, Clinical Epidemiologist, Health Quality Ontario
Bronwen McCurdy, Clinical Epidemiologist, Health Quality Ontario
Alexandra Chambers, Clinical Epidemiologist, Health Quality Ontario
Jennifer Fergenbaum, Clinical Epidemiologist, Health Quality Ontario
Kellee Kaulback, Medical Information Officer, Health Quality Ontario
Dr. Charles Wright, Chair, OHTAC
Dr. Les Levin, Vice-President, Health Quality Ontario

OHTAC

OHTAC Appropriateness Working Group

Evidence Development & Standards



Ontario

Health Quality Ontario

Qualité des services
de santé Ontario

www.HQOntario.ca