

Date: August 14, 2012

To: Central Zone – Red Deer: Physicians, Nurses and Laboratory

From: AHS Laboratory Services

Re: Urine Protein Concentration by Urinalysis

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Key Messages:

A bulletin was released November, 2011 for the new, automated Urinalysis and Microscopy instrument available at the Red Deer Regional Hospital. Our comparison studies for qualitative urinalysis testing found few differences between the new, automated method and the old, manual method.

It is important to consider the urinalysis protein concentration in the context of the clinical presentation of the patient to appropriately determine if no follow-up is required, or if a repeat urinalysis, quantitative urine albumin (microalbumin) or total protein testing is required.

Why this is important:

It is noted by the manufacturer of our new method that when measuring urine protein, the new urinalysis method is particularly sensitive for albumin, but less sensitive to globulin, Bence-Jones protein and mucoprotein. This would be supported by comparison studies done in Red Deer. For example, we found that samples reporting “trace” (~0.15 g/L) urine protein on the previous method could report between 0.1 and 0.5 g/L on the new method. Similarly, samples reporting 0.3 g/L of urine protein on the previous method could report between 0.3 and 0.7 g/L on the new method.

Comparison studies also demonstrated that the new urinalysis method (qualitative urinalysis) was more comparable than our old urinalysis method to the quantitative urine protein method utilized for random and 24 hour urine protein results.

Inquiries and feedback may be directed to:

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This bulletin has been reviewed and approved by:

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