

Changes to Urine Creatinine and Associated Testing

Effective 7/16/2018

• New Urine Creatinine Calibration

 The urine creatinine calibration material for the hospital-based urine creatinine method will now be standardized and traceable to an Isotope Dilution Mass Spectrometry reference method. This change will help promote national standardization of urine creatine methods, but will show a <u>decrease</u>, on average, of approximately 13-14% when compared with the previous urine creatinine methodology results.

• Laboratory tests affected by the change

- o Tests that you will see an approximate 13-14% result decrease:
 - Random urine creatinine
 - 24-hour urine creatinine
 - Creatinine clearance
- Tests that you will see an approximate 13-14% result <u>increase</u>:
 - Urine albumin/creatinine ratio
 - Urine protein/creatinine ratio

• Addition of urine calcium/creatinine ratio to test menu

- The reference range for the urine calcium/creatinine ratio will be:
 ≤0.14 mg Ca/mg Cr
- This test provides an alternative for pediatric patients instead of subjecting the child to a 24-hour urine calcium collection. However, values exceeding
 mg Ca/mg Cr, may indicate hypercalciuria. Random urinary calcium lacks sensitivity and specificity to diagnose hypercalciuria and, therefore, a 24-hour urine calcium should be used instead.

For questions or comments, please contact Stephen Manzella, PhD at either (717) 851-2549 or smanzella@wellspan.org .

Beckman Coulter Product Announcement C22857-AA, Urine Calibrator Traceability for Urine Creatinine, January 2018.

Foley, K.F. and Boccuzzi, L. Urine Calcium: Laboratory Measurement and Clinical Utility. *LABMEDICINE*, 2010; Vol41, No.11:683-686.