

## **Technical Memorandum**

**TO:** Physicians, Medical Staff and Clients

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DLS Medical Director QMC Laboratory Director

**Date:** August 29, 2019

**Subject:** Update for Urinalysis Result Reporting

As technology continues to advance, DLS is actively pursuing ways to further improve quality and standardization in both the accuracy of results and format of reporting. One of these involves automated urinalysis systems. Beginning 9/16/2019, DLS will be moving from its current system to a new automated urinalysis system. This change not only improves the reliability of results but allows us to further standardize the reporting format for a number of parameters involved in urinalysis. Instead of concentration cutoffs (which can be misinterpreted as representing actual concentrations of that biochemical in urine) we will move to standardized semi-quantitative reporting which now also matches the majority of the other parameter formats in urinalysis. The transition will be phased-in by testing locations, starting with QMC Punchbowl, Guam, Core Lab/QMC West Oahu/Molokai General Hospital and DLS satellite locations, and North Hawaii Community Hospital.

While the majority of the parameters are not expected to change significantly, the reporting format for Urine Protein, Glucose and Ketones will change. The following table shows the changes that will occur when the new systems are implemented.

Protein						
Current	NEG	TRACE	30 mg/dl	100 mg/dl	≥300 mg/dl	
New	NEG	TRACE	1+	2+	3+	
Glucose						
Current	NEG	100 mg/dl	250 mg/dl	500 mg/dl	≥1000 mg/dl	
New	NEG	1+	2+	3+	4+	
Ketone						
Current	NEG	5 mg/dl	15 mg/dl	40 mg/dl	≥80 mg/dl	
New	NEG	TRACE	1+	2+	3+	

In addition, the reference range for urine Urobilinogen will be changed based on manufacturer recommendations using reflectance spectroscopy in combination with reagent stick chemistry to provide results that are more accurate and precise. The new updated range is shown below.

Parameter	Previous Reference Range	New Reference Range	
	0.1.1.0 (1)	2.0	
Urine Urobilinogen	0.1-1.0 mg/dl	<2.0 mg/dl	

Thank you for your continued patience and understanding. If you have any questions, please call Client Services at (808) 589-5101 or Dr. Wesley J. Kim at (808) 589-5131.