To: All Regional Medical Laboratory, Inc. (RML) Clients

From: Regional Medical Laboratory, Inc.

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Subject: Syphilis Testing Algorithm

Syphilis testing volume at RML has been stable over the last 4 years between 25,000-27,000 tests per year; however, the positive rate has increased by 146% from 2018 to 2021. With the observed increase in positives seen in 2022, we expect the percentage of positives to continue to climb. With the positivity rate increasing so significantly, we recommend that providers initially screen with the **Syphilis Ab Screen Algorithm** rather than the RPR. The algorithm is a reverse sequence whereby we initially test for Treponemal Ab by Chemiluminescence (CIA) technology and if **positive**, **reflex to the RPR**. If the CIA anti-Treponemal Ab is positive you will receive an index and if the following RPR is positive, you will receive a titer. We also desire to alert providers that if the CIA anti-Treponemal is in a value range that RML has previously determined to be even remotely suspicious for a false positive, a Treponema Pallidum Particle Agglutination (TPPA) assay will be performed. Note the attached flow sheet. Additional tests will generate additional charges. Once the patient has been determined to be Treponemal Ab positive, RPR is now the only test necessary during followup for monitoring the success of treatment and re-infection. The Treponemal Ab will remain positive for decades if not for life. The results reported for the algorithm must always be interpreted in light of the clinical presentation and medical history of the patient. A positive Syphilis antibody test is reported to the state health department

TEST NAME	TEST MNEMONIC	TEST NUMBER	CPT CODE	LOINC CODE
Syphilis Screen	SYPAB	5500607	86780	24110-9
(RPR) Non Treponemal Antibody	NONTREP AB	5500605	86592	20507-0
(TPPA) Treponema Pallidum Particle Agglutination (If deemed necessary)	TPPA	5501065	86780	24312-1

If you have questions or concerns, please feel free to contact Gerald C. Miller, Ph.D. at 918-744-3132 ext 15543, gmiller@ascension.org Kevin Wamego, MT (ASCP) at 918-744-3132 ext 18273 kevin.wamego@ascension.org Shawn Whitmore, C(ASCP)^{CM} at 918-744-3132 ext 15518 shawn.whitmore@ascension.org

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