Meritus Health | Hagerstown Medical Laboratory

August 7, 2012

To: **Clients of Hagerstown Medical Laboratory**
Medical Providers

From: **John G. Newby, M.D.**
HML Medical Director

Subject: **Change in Protocol for Syphilis Serology Testing**

This memorandum is to inform you of upcoming changes to the syphilis testing protocol in our clinical laboratory. The effective date of this change is August 13, 2012.

Serological testing is essential in the detection and control of syphilis infection. According to the 2010 CDC STD Treatment Guidelines, presumptive diagnosis of syphilis is possible with the use of two types of serologic tests: non-treponemal and treponemal tests. Non-treponemal tests, such as RPR and VDRL, detect non-specific antibodies to cardiolipin which are present during acute conditions. Treponemal tests detect antibodies to *Treponema pallidum* and indicate exposure to *T. pallidum* at some time during a person's life.

According to the guidelines, both treponemal and non-treponemal assays have limitations, and consequently any positive results should be confirmed by alternate methods.

Recently, many laboratories have adopted treponemal tests for screening purposes because of the improved performance (fewer false positives), elimination of the subjective interpretation of the RPR, and the ability to automate high testing volumes. HML will be adopting the treponemal antibody screening method for these reasons. With this testing protocol, sensitivity and specificity are improved in the initial syphilis screen.

Our current protocol uses the RPR for initial screening, with confirmation by a treponemal antibody test and the RPR titer. **Under the new protocol, the treponema antibody by enzyme immunoassay will be used for the initial screen, and confirmation of positive results will be done with an RPR (with titer, if positive) *and* an alternate treponema antibody assay (partical agglutination "TP-PA").** Both of these confirmation assays will be performed at Quest Diagnostics / Nichols Institute in Chantilly, VA. Since antibodies to *Treponema pallidum* generally persist for many years, diagnosis of active disease and monitoring of treatment must be based on the RPR titer.

You do not need to alter your ordering patterns. With the implementation of this change, all orders for RPR will be converted to the treponema antibody assay under the new protocol. As is currently the case, the necessary confirmatory testing will be automatically added if the screen is positive (less than 1% of screens).

Questions about this change may be addressed to me at 301-665-4901 or 800-428-2105.