"Seven participating laboratories performed approximately 3.4 million LD tests on approximately 2.4 million specimens nationwide at an estimated cost of $492 million." Hinckley et al (2014).

Reference:

Hinckley, A.F., Connally, N.P., Meek, J.I., Johnson, B.J., Kemperman, M.M. Feldman, K.A., White, J.L. and Mead, P.S. (2014) Lyme Disease Testing by Large Commercial Laboratories in the United States. Clinical Infectious Diseases. 59(5), p.676-681.

Lyme disease testing by commercial laboratories in the United States http://ctt.ec/8a1ae+ @ivteam #ivteam

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Abstract:

Background: Laboratory testing is helpful when evaluating patients with suspected Lyme disease (LD). A 2-tiered antibody testing approach is recommended, but single-tier and nonvalidated tests are also used. We conducted a survey of large commercial laboratories in the United States to assess laboratory practices. We used these data to estimate the cost of testing and number of infections among patients from whom specimens were submitted.

Methods: Large commercial laboratories were asked to report the type and volume of

testing conducted nationwide in 2008, as well as the percentage of positive tests for 4 LD-endemic states. The total direct cost of testing was calculated for each test type. These data and test-specific performance parameters available in published literature were used to estimate the number of infections among source patients.

Results: Seven participating laboratories performed approximately 3.4 million LD tests on approximately 2.4 million specimens nationwide at an estimated cost of $492 million. Two-tiered testing accounted for at least 62% of assays performed; alternative testing accounted for <3% of assays. The estimated frequency of infection among patients from whom specimens were submitted ranged from 10% to 18.5%. Applied to the total numbers of specimens, this yielded an estimated 240 000 to 444 000 infected source patients in 2008.

Discussion: LD testing is common and costly, with most testing in accordance with diagnostic recommendations. These results highlight the importance of considering clinical and exposure history when interpreting laboratory results for diagnostic and surveillance purposes.

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