PROCEDURE
Corewell Health East - Laboratory Auto-Dilution Verification - Dearborn, Taylor, Trenton, Wayne

This Procedure is Applicable to the following Corewell Health sites:
Corewell Health Dearborn Hospital, Corewell Health Taylor Hospital, Corewell Health Trenton Hospital, Corewell Health Wayne Hospital

Applicability Limited to: N/A

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Functional Area: Clinical Operations, Laboratory

Lab Department Area: Lab - Chemistry

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1. Purpose and Objective
To outline the process to evaluate, at least annually, the accuracy of each instrument's auto-dilution function by comparing auto-diluted results and manually diluted results from a sampling of auto-diluted tests available on each instrument.

2. Responsibility
Personnel who have completed the competency requirements will perform this testing.

3. Definitions
A. Analytical Measuring Range (AMR)

4. Procedure
A. Obtain a specimen that is known to be above the analytical measurement range (AMR) for an auto-diluted test. Run three separate aliquots of the test straight so that the instrument auto-dilutes the specimen to obtain a result. Manually dilute the same specimen three separate times so that the result obtained falls within the AMR for that test. If an instrument performs auto-dilutions on multiple tests, choose at least 2 tests to confirm the accuracy of the auto-dilution function.
   1. Calculate the percent difference by using the following formula:
      a. (Average of auto-diluted results – Average of manually diluted results) / Average of auto-diluted results X100 = % Difference

B. Document results on attached worksheet. If the results exceed the defined acceptable difference of 10%, repeat analysis must be performed. If repeat analysis fails, then the auto- dilution option will be disabled, and a service call will be initiated. See individual manufacturers' instructions for disabling auto-dilution functions or call manufacturers' customer service for support.

5. Revisions
Corewell Health reserves the right to alter, amend, modify or eliminate this document at any time without prior written notice.

6. Procedure Development and Approval

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7. Keywords

Not Set