



RPMS Laboratory Advisory

April 14, 2011

Number: **2011 LABORATORY ADVISORY-3**
Title: Estimated Average Glucose Calculation Issue
Application: Laboratory Version 5.2
Patch: Patch 1027
Priority: High

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SUMMARY

The Estimated Average Glucose (eAG) calculation was added as an enhancement to RPMS Laboratory v5.2 Patch 1027. This feature implemented a delta check that calculates and displays the eAG whenever a Hemoglobin A1c is reported using the following calculation:

$$\mathbf{eAGmg/dl = 28.7 \times A1C - 46.7}$$

An issue has been reported whenever results of the Hemoglobin A1C test exceed the reporting range of the test itself and 'greater than' symbol (>) is generated by the instrument along with a number. An example is a Hemoglobin A1C result of >14%. This is a rare result but does occur sporadically. The RPMS Laboratory package will incorrectly interpret the 'greater than' symbol (">") as a 0 (zero), thus generating a result of -47 in the eAG result field. Furthermore, the lab package will not allow a user to edit the incorrect result. The following example illustrates this:

$$\mathbf{eAGmg/dl = 28.7 \times 0 - 46.7}$$

$$\mathbf{eAGmg/dl = - 47 \text{ (rounded)}}$$

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SOLUTION

This issue will be addressed in RPMS Laboratory v5.2 Patch 1029. The OIT Laboratory team recommends that the eAG feature that came with RPMS Lab patch 1027 not be activated until this issue is fixed.

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If you have any questions or concerns, please contact the OIT Help Desk at 1-888-830-7280 or email at support@ihs.gov

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