Instrument/Equipment Performance Verification- Troy Laboratory

Effective: 2/6/2025

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**PURPOSE AND OBJECTIVE:**

To provide instruction on verifying performance of instruments and equipment to ensure that they are performing according to expectations.

**PROCEDURE:**

When new equipment is received into the laboratory, relocated within the laboratory, or after major maintenance, certain checks may be needed to ensure proper operation.

1. Hospital BioMed must perform checks on any new electrical equipment.
   1. Enter a ticket into the Facilities/Biomed page on the intranet.
   2. Biomed will try to intercept the equipment when it arrives in Shipping.
   3. If the equipment arrives in the laboratory without being checked by Biomed, call them to come and inspect the equipment prior to use.
   4. After the equipment is checked, there will be an asset tag on the equipment which will identify that piece of equipment as belonging to the laboratory.
2. After the electrical check, the equipment will need to be verified by the laboratory:
   1. Centrifuges will need verification of timing and speed.
   2. New instrumentation will need a complete validation. See Evaluation of New Testing Methodology Procedure for specific instructions for new analyzers.
   3. Temperature dependent equipment will need to be verified and if required, may need temptrak sensors installed. (Refrigerators, freezers and heat-blocks).
   4. Relocated or loaner instruments need to be verified prior to use. Minimum checking should include:
      1. Calibration, if required.
      2. Testing Quality Control Materials.
      3. Any other daily maintenance or function checks required by the manufacturer.
      4. Patient comparisons may be performed if specimens are available. However, not all samples are able to be saved for comparison testing on a loaner or reactivated instrument.
      5. CAP samples may also be used for verification of equipment operation.
3. If all function checks pass, the equipment may be placed in use.
   1. Document equipment serial number, asset tag number and manufacturer information in the manual for the equipment.
4. Manufacturer’s instructions will be followed when checking equipment and instruments after major maintenance. This could include:
   1. Function checks
   2. Calibrations
   3. Quality Control

**REFERENCES:**

CAP All Common Chemistry Checklist

Biomedical engineering sharepoint