

Respiratory Therapy: Pulmonary Function: Quality Control (QC) Considerations

Site Applicability

St. Paul's Hospital

Mount Saint Joseph Hospital

Practice Level

Respiratory Therapist

Requirements

Providence Health Care Pulmonary Function Labs will follow a specified schedule for frequency of quality control tests on all of the pulmonary function testing equipment.

When issues arise, specific steps should be followed to ensure equipment is functioning/operating properly prior to testing patients.

Guideline

Biologic and Physical Controls Outside of Acceptable Limits

Recommendations:

1. Staff maintenance and troubleshooting
2. If staff maintenance cannot fix the problem, contact Biomedical Engineering.
3. If Biomedical Engineering cannot fix the problem, the vendor or manufacturer will be called in for servicing of the affected equipment.

Ambient Conditions Outside of Normal Range

Recommendations:

1. Ambient conditions should not fall outside of the normal range as the pulmonary function lab is located in a closed environment. If numbers do fall outside of the recommended range, recheck the measurements for accuracy and contact supervisor if necessary.

Quality Control Issues and Patient Testing

Recommendations:

1. When QC issues are being investigated, patients will not be tested on equipment in question.
2. If staff maintenance cannot fix the issue, Biomedical Engineering will be called to assist



3. If Biomedical Engineering cannot fix the problem, the vendor or manufacturer will be called in for servicing of equipment. Once resolved, biologic normal testing will need to be completed prior to resumption of patient testing.

Equipment Changes

Recommendations:

1. When equipment is changed out, a biologic QC will be done prior to patient testing.
2. Before new equipment is put into service, acceptance testing consisting of a biologic control performing 10 tests must be completed. The pulmonary function lab Medical Director must then validate the tests before any testing is performed on patients. **Best practice: two biologic controls for five consecutive days with an AM and PM test should be completed.**



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