Blood Sample Running Procedure

Audience

All Respiratory Care Services clinical personnel.

Policy

The purpose of this policy is to define the procedure of running blood samples after the blood draw is completed. It will include the collection, transport, handling, and resulting of the samples. This includes all samples to be run on the Rapid Point 500 machine.

Principle

All specimens must be handled according to the Standard/Universal Precautions guidelines written by the Center for Disease Control and Prevention (CDC) and enforced by Occupational Safety and Health Administration (OSHA).

Proper specimen collection and handling are integral parts of obtaining a valid, timely, laboratory test result. Specimens must be collected in the appropriate container. They must be correctly labeled and promptly transported to the laboratory in conditions specific to the tests required.

Specimen Collection

Accurate patient identification before specimen collection is extremely important. Patients must be positively identified using two unique identifiers. Label all specimens in the presence of the patient. Specimens will be collected in the EPIC beaker system by scanning wrist band of patient.

Transport

Specimen must be packaged and transported to the laboratory in a timely manner. The sample will be transported in a sealed plastic bag labeled as biohazard. Personnel shall transport sample to the lab wearing a glove on the hand carrying the sample.

Handling

All personnel will wear appropriate PPE when handling and running sample including gown, gloves, and eye protection. All blood gas samples will be run within 30 minutes of obtaining the sample. All air bubbles will be expelled from the sample immediately. Blood samples that are beginning to or have already coagulated are unacceptable for analysis. Samples must be well mixed prior to analysis. All lactic acids samples will be run within 15 minutes of obtaining the sample, put on ice if longer than 15 minutes for up to 30 minutes after collection.

Resulting
Samples will be received in EPIC Beaker prior to samples being run. Once received, the samples will be run as ordered by provider per the manufacturers running procedure. Results will then be confirmed in EPIC beaker and verified as needed.

Reporting

EPIC Beaker has automatic preset expected values. EPIC Beaker has abnormal value and critical value presets. Any abnormal results must be verified by the respiratory care services personnel running sample. Any critical value results must be reporting to provider and documented in the communication log as to the date, time, and who was notified. Critical results must be reported within 30 minutes of when samples is resulted.

Machine Maintenance

Calibration is automatically performed every 30 minutes, with the ability to increase frequency as needed. If the calibration fails, the system should not be allowed for use until the failed calibration is corrected.

The Rapid Point 500 machine provides automatic quality control analysis for each parameter, measuring three level of quality control material. Automatic quality control is run at least every 8 hours. The analyzer automatically assesses all automatic QC results and flags any results that are out of the normal range. All records are stored in the RapidComm system.

Cartridge change outs will be completed as per the manufacturer’s recommendations.

As a second method of quality control, the respiratory care services personnel will analyze manual quality control samples with every measurement cartridge change as well as if needed. This will be run every 30 days at minimum.

Analyzer Data Logs

Data logs are historically files in the RapidComm system including all patients, calibrations, and quality control measurements as well as pertinent system events. All data is automatically stored in RapidComm.

References

Siemens Rapid Point 500 Operator Manual
Policy 14.1.1 Specimen Collection from Laboratory Services
Policy 4.4.2 Siemens Rapidpoint 500 Procedure from Pathology Clinical Services Policies
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