CONWAY REGIONAL MEDICAL CENTER
CLINICAL LABORATORY

Specimen Assessment and Rejection

Purpose/Principle:
To provide quality assurance within the Clinical Laboratory and to ensure accurate test results.

Policy:
Prior to testing, all samples received by the Clinical Laboratory are assessed for acceptability. Criteria for rejection are in place and are designed both to ensure accurate identification of samples and to assess for optimal testing quality. Each department within the Laboratory maintains a Specimen Rejection Log. Monthly statistical assessment is performed and corrective actions taken to address targeted problem areas. In each instance where a sample is rejected, the patient care provider is to be notified of the rejection. In all cases of sample rejection, the technologist is expected to work with the care provider to deliver accurate and timely results. The technologist may use judgment concerning all cases of rejection, but must reject any specimen which they are in doubt about the patient identification. *Once rejected, regardless of the reason, it is unacceptable to process any rejected sample for testing. Questions from physicians are to be directed to the Medical Director or pathologist on call.*

Sample Identification/Request Errors:

1. Specimens must be labeled with a minimum of two unique identifiers.
2. Unlabeled specimens will be rejected. Patient Name Discrepancy form is not applicable.
3. Specimens should be accompanied by a test requisition which contains the patient name, identifying number or code, age, sex, date and time of collection.
4. Source of the specimen should be noted when appropriate.
5. Samples received with a patient name discrepancy may be corrected by the collector, if in the judgment of the Laboratory staff, a new specimen may not be obtained. A Patient Name Discrepancy form must be completed.

Collection and Transport Errors:

1. Contamination of the specimen shall be cause for rejection.
2. Insufficient specimen for testing shall be cause for rejection.
3. Inappropriate specimens for testing shall be cause for rejection.
4. Improper storage and inappropriate delay in sample testing shall be cause for rejection.
5. Specimens drawn at incorrect time for accurate results may be rejected.
6. Incorrect preparation of patient for the test may result in specimen rejection.

Evaluation and Handling of Suboptimal Specimens: Purple, green and blue stopper tubes should be mixed by gentle inversion immediately after the draw. The following criteria may be used for rejection of samples for testing.

1. EDTA tubes – Purple stoppers
    a. Tubes must be allowed to fill completely . Tubes that are less than half full will show drastic alteration of results.
    b. Visually inspect each tube for a clot prior to analysis. Clotted tubes will not show a smooth flow when inverted. Any tubes suspected of having a clot should be checked with applicator sticks prior to analysis. Clotted tubes must be redrawn as results are not valid.
2. Heparin tubes – Green stopper
    a. Samples must be analyzed as soon as possible. Tubes containing separator gels must be centrifuged as soon as possible.
    b. Good collection technique is critical to avoid hemolysis, which will falsely elevate certain results .
    c. Visually inspect each spun sample for hemolysis, icterus, and lipemia. See guidelines below for testing impacts.
3. Plain tubes – Red or Gold stopper
    a. Good collection technique is critical to avoid hemolysis, which will falsely elevate certain results.
    b. Samples must be analyzed as soon as possible. Tubes containing separator gels must be centrifuged as soon as possible.
    c. Inversion of red top plain tube is not required or recommended.
    d. Tube containing a clot activator should be gently inverted 5 times.
    e. Plain tubes must be allowed to clot completely prior to centrifugation.
    d. Visually inspect each spun sample for hemolysis, icterus, and lipemia. See guidelines below for testing impacts.
4. Sodium Citrate tube – Blue stopper
    a. Tubes must be allowed to fill completely. Tubes that are not filled completely must be redrawn as proper dilution with the anticoagulant must be obtained for valid results.
    b. Visually inspect each tube for a clot prior to analysis. Clotted specimens must be redrawn as results are not valid.

Testing Guidelines for Hemolysis, Icterus and Lipemia

1. Icterus (due to abnormally high concentrations of bilirubin) may impact the assessment of certain analytes. Consult test methodology manuals for guidelines.
2. Lipemia (due to abnormally high concentrations of lipids) may impact the assessment of certain analytes. Consult test methodology manuals for guidelines.

3. Hemolysis (due to abnormally high concentration of hemoglobin) will falsely elevate the following analytes proportionally to the degree of hemolysis:
    a. Potassium
    b. LDH
    c. Iron/UIBC
    d. Ammonia
    e. Magnesium
    f. PO4

Consult test methodology manuals for additional guidelines and impacted methods.

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APPROVED BY:_____DATE_____
(Medical Director)

APPROVED BY:_____DATE_____
(Clinical Director)