§ 493.1240

actions taken to resolve problems, revision of policies and procedures necessary to prevent recurrence of problems, and discussion of general laboratory systems quality assessment reviews with appropriate staff.

(c) The laboratory must document all general laboratory systems quality assessment activities.

[68 FR 3703, Jan. 24, 2003; 68 FR 50724, Aug. 22, 2003]

PREANALYTIC SYSTEMS

§ 493.1240 Condition: Preanalytic systems.

Each laboratory that performs non-waived testing must meet the applicable preanalytic system(s) requirements in §§ 493.1241 and 493.1242, unless HHS approves a procedure, specified in Appendix C of the State Operations Manual (CMS Pub. 7), that provides equivalent quality testing. The laboratory must monitor and evaluate the overall quality of the preanalytic systems and correct identified problems as specified in §493.1249 for each specialty and subspecialty of testing performed.

§493.1241 Standard: Test request.

- (a) The laboratory must have a written or electronic request for patient testing from an authorized person.
- (b) The laboratory may accept oral requests for laboratory tests if it solicits a written or electronic authorization within 30 days of the oral request and maintains the authorization or documentation of its efforts to obtain the authorization.
- (c) The laboratory must ensure the test requisition solicits the following information:
- (1) The name and address or other suitable identifiers of the authorized person requesting the test and, if appropriate, the individual responsible for using the test results, or the name and address of the laboratory submitting the specimen, including, as applicable, a contact person to enable the reporting of imminently life threatening laboratory results or panic or alert values.
- (2) The patient's name or unique patient identifier.
- (3) The sex and age or date of birth of the patient.

- (4) The test(s) to be performed.
- (5) The source of the specimen, when appropriate.
- (6) The date and, if appropriate, time of specimen collection.
- (7) For Pap smears, the patient's last menstrual period, and indication of whether the patient had a previous abnormal report, treatment, or biopsy.
- (8) Any additional information relevant and necessary for a specific test to ensure accurate and timely testing and reporting of results, including interpretation, if applicable.
- (d) The patient's chart or medical record may be used as the test requisition or authorization but must be available to the laboratory at the time of testing and available to CMS or a CMS agent upon request.
- (e) If the laboratory transcribes or enters test requisition or authorization information into a record system or a laboratory information system, the laboratory must ensure the information is transcribed or entered accurately.

§ 493.1242 Standard: Specimen submission, handling, and referral.

- (a) The laboratory must establish and follow written policies and procedures for each of the following, if applicable:
 - (1) Patient preparation.
- (2) Specimen collection.
- (3) Specimen labeling, including patient name or unique patient identifier and, when appropriate, specimen source.
- (4) Specimen storage and preserva-
- (5) Conditions for specimen transportation.
- (6) Specimen processing.
- (7) Specimen acceptability and rejection.
- (8) Specimen referral.
- (b) The laboratory must document the date and time it receives a specimen.
- (c) The laboratory must refer a specimen for testing only to a CLIA-certified laboratory or a laboratory meeting equivalent requirements as determined by CMS.
- (d) If the laboratory accepts a referral specimen, written instructions must be available to the laboratory's

clients and must include, as appropriate, the information specified in paragraphs (a)(1) through (a)(7) of this section.

§ 493.1249 Standard: Preanalytic systems quality assessment.

- (a) The laboratory must establish and follow written policies and procedures for an ongoing mechanism to monitor, assess, and when indicated, correct problems identified in the preanalytic systems specified at §§ 493.1241 through 493.1242.
- (b) The preanalytic systems quality assessment must include a review of the effectiveness of corrective actions taken to resolve problems, revision of policies and procedures necessary to prevent recurrence of problems, and discussion of preanalytic systems quality assessment reviews with appropriate staff.
- (c) The laboratory must document all preanalytic systems quality assessment activities.

[68 FR 3703, Jan. 24, 2003; 68 FR 3703, Aug. 22, 2003]

ANALYTIC SYSTEMS

§ 493.1250 Condition: Analytic systems.

Each laboratory that performs non-waived testing must meet the applicable analytic systems requirements in §§ 493.1251 through 493.1283, unless HHS approves a procedure, specified in Appendix C of the State Operations Manual (CMS Pub. 7), that provides equivalent quality testing. The laboratory must monitor and evaluate the overall quality of the analytic systems and correct identified problems as specified in §493.1289 for each specialty and subspecialty of testing performed.

§ 493.1251 Standard: Procedure manual.

- (a) A written procedure manual for all tests, assays, and examinations performed by the laboratory must be available to, and followed by, laboratory personnel. Textbooks may supplement but not replace the laboratory's written procedures for testing or examining specimens.
- (b) The procedure manual must include the following when applicable to the test procedure:

- (1) Requirements for patient preparation; specimen collection, labeling, storage, preservation, transportation, processing, and referral; and criteria for specimen acceptability and rejection as described in § 493.1242.
- (2) Microscopic examination, including the detection of inadequately prepared slides.
- (3) Step-by-step performance of the procedure, including test calculations and interpretation of results.
- (4) Preparation of slides, solutions, calibrators, controls, reagents, stains, and other materials used in testing.
- (5) Calibration and calibration verification procedures.
- (6) The reportable range for test results for the test system as established or verified in §493.1253.
 - (7) Control procedures.
- (8) Corrective action to take when calibration or control results fail to meet the laboratory's criteria for acceptability.
- (9) Limitations in the test methodology, including interfering substances.
- (10) Reference intervals (normal values).
- (11) Imminently life-threatening test results, or panic or alert values.
 - (12) Pertinent literature references.
- (13) The laboratory's system for entering results in the patient record and reporting patient results including, when appropriate, the protocol for reporting imminently life-threatening results, or panic, or alert values.
- (14) Description of the course of action to take if a test system becomes inoperable.
- (c) Manufacturer's test system instructions or operator manuals may be used, when applicable, to meet the requirements of paragraphs (b)(1) through (b)(12) of this section. Any of the items under paragraphs (b)(1) through (b)(12) of this section not provided by the manufacturer must be provided by the laboratory.
- (d) Procedures and changes in procedures must be approved, signed, and dated by the current laboratory director before use.
- (e) The laboratory must maintain a copy of each procedure with the dates