Test Tracking System

Requirements for good laboratory practice and COLA Laboratory Accreditation programs are underlined.

INTRODUCTION

Most laboratory errors are not analytical, but the result of problems with patient preparation, specimen collection, labeling, or processing. Patient specimens sometimes go through several phases of processing and testing before the result is obtained.

A test tracking system is a mechanism which assures positive identification of a specimen throughout the ordering, collecting, processing, testing, and reporting phases. A good test tracking system will greatly reduce the frequency of errors due to confusing specimens or reporting a result that belongs to someone else. Mixing up specimens can have serious consequences for patients and, at best, are a source of embarrassment to the laboratory. Who can forget the positive pregnancy test reported on John Jones when it was really Jane Jones' report!

The goal of the test tracking system is to link the patient to his or her sample throughout the entire testing process while still maintaining patient confidentiality. Your system should track the specimen from the physician's test order, through the specimen collection and processing stages and the actual analysis. However, your system does not end with the test result, your laboratory must report the results to the person ordering the test in a timely manner.

When designing or modifying your laboratory's test tracking system, keep the following points in mind. A successful system should be:

1. Easy to use; keep it simple.
2. Timely in processing samples and running tests.
3. Reproducible; the same way every time, every day..

THE SYSTEM

Your laboratory needs to maintain written and/or electronic records of each step of the process, from order to report. Generally, this is done through the following components of the test tracking system:

- The test requisition,
- The test record (logs or other record keeping devices), and
- Test reports.

In many cases, these components of your system may be combined into one form to serve all three functions.

The test requisition or order may consist of a patient encounter form, fee ticket, specific laboratory requisition, or the patient chart, and come in either electronic or written form. Although progress notes or patient chart records may serve as a requisition, these are not recommended, since these confidential records may have to be produced for a laboratory surveyor. However, in office practices in which the physician performs the laboratory tests, a notation in the patient's chart may serve as a written order.

When a test is ordered verbally, it must be followed by a written request within 30 days of the verbal order. If your laboratory accepts verbal orders, develop a mechanism to verify the receipt of a written requisition. Refer to Appendices A and B for examples of forms that your laboratory may wish to use, particularly if you accept verbal requests from outside physicians.

Your test requisition should include:

1. Full name of the patient. An additional way of identifying the patient is needed when the patient has a common or duplicate name. (i.e. John Jones, Sr. and John Jones, Jr.). Examples of additional ways of identifying the patient's sample include:

    - Date of birth
    - Social Security number
    - Chart or account number
    - Preprinted number stamped on the requisition
    - Bar code or
    - Some other identifier that uniquely links that specimen to the correct patient.

2. Name and address of the person requesting the test.

3. A contact person to whom to report "panic" or life-threatening test results. This person is usually the physician who ordered the test unless otherwise specified.

4. Name of the test(s) requested.

5. Date and time of specimen collection.

6. Any clinical information relevant to the test results. Some examples of this information include age, gender, fasting, date and time of last dose of medication for therapeutic drug monitoring, etc.

LABFACTS 7

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The test record is a record of all patient specimens as they are being collected, received, processed and tested by the laboratory. This ensures that all test results are accurately reported. The test record can be a single form divided into columns with each new patient specimen entered in a new row, computer or billing logs, or a filing system for requisitions, records and reports. It should include:

1. The patient's full name.

2. When necessary, a unique additional identifier which can be linked back to the patient.

3. The date and time specimen is received in the lab.

4. The condition of the specimen if the specimen does not meet the laboratory's criteria for specimen acceptability.

5. Identity of the person performing the test, such as:
- Handwritten initials (*ABC*)
- Computerized initials (ABC)
- Computerized ID code (Tech 344)

6. Records of specimen testing including:
- Analyzer printouts
- Log sheets and
- Electronic files, if used

The test report is the final form that is sent to the physician or other person who ordered the test. Some laboratories require the final report to be reviewed by a supervisor before it is sent. If the laboratory does not have access to the patient's chart, the original report or an exact duplicate test report should be filed in the laboratory so that it can be easily retrieved.

The test report should include:

1. Name and address of the testing laboratory.
2. Test results with units of measure.
3. Date the report was released from the laboratory.

"Normal values" with units of measure are also valuable information to include.

TEST TRACKING PROCEDURES

Written procedures are the most common way to ensure all steps of the process are accomplished. Procedures should be sufficiently detailed to allow staff to understand how to identify patients, how to label specimens, and how to maintain a unique identifier on the specimen as it is transferred to other containers such as sample cups or test tubes. Which unique identifiers the laboratory uses should be included in the procedure manual. The procedure should also state:

- How and when to retain the testing records,
- What information the report form should contain,
- Whom to notify when the result is a "panic" value,
- The policy that advises to whom reports can be released, and
- How long to keep, and where to store, records.

RECORD RETENTION

All test records must be retained for a minimum of two years with the exception of immunohematology reports which must be stored for a minimum of 5 years and pathology records which must be stored for 10 years from the date of reporting. The laboratory can choose a variety of ways to do this: a three-ring binder to hold logs, a file cabinet or drawer, or a computer system. Whatever the system, this information should be easily available to laboratory staff.

QUALITY ASSURANCE

The laboratory director needs to have a mechanism for periodically evaluating the test tracking system to be sure that it is being followed and that it is preventing specimen mix-ups. This is part of the laboratory's Quality Assurance Program. Like other parts of the QA program, it should be written. Areas to evaluate include labeling and transportation of specimens, test requisitions (reviewed for completeness, relevance, and legibility), test records, and test reports. A quick way to check the adequacy of the storage system is to ask the following questions:

1. Can I locate all results for tests performed on a given date?

2. Can I list all patients who had a particular test performed during a given time period?

3. Can I locate all tests performed on a particular patient during a given time period?

Keeping track of patients' specimens in a way that avoids confusion can prevent serious errors and possible injury to patients. It's an important part of laboratory testing.

Appendix A: COLA LabFacts 7

Verbal Request Test Log

Laboratory Name
Laboratory Address
City, State, Zip

Date	Patient's Name	Ordering Physician	Tests Ordered	30–DAY Deadline For Written Request	Written Request Received *(Y/N-date)*	Date Follow–up Form Sent	Date Follow–up Form Received

Appendix B: COLA LabFacts 7

Verbal Laboratory Request Follow-up Form

Laboratory Name
Laboratory Address
City, State, Zip

Date: _____

Dear Dr. _____

On ____date_____ you verbally requested the following laboratory tests:

_____(list tests)_____

on your patient, _____(Patient Name)_____.

Under the regulations defined in the Clinical Laboratory Improvement Amendments of 1988 (CLIA 88), all verbal laboratory testing orders must be followed with a written request within 30 days of the verbal order. To date, this laboratory has not received a written order for these tests. Please sign and date this request form, confirming your verbal order. Return to the laboratory at the address listed above.

Ordering Physician:_____ Date:_____