



Medical Laboratory

NTQF Level III

Learning Guide 27

Unit of Competence: Collect and Process Medical Samples

Module Title: Collect and Process Medical Samples

LG Code: HLT MLT3 LO6-LG27

TTLM Code: HLT MLT3TTLM 0919v1

LO6. Distribute samples





Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 5 to 11.
3. Read the information written in all Information Sheets. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
4. Accomplish all Self-check according to learning session separately
5. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the Self-checks).
6. If you earned a satisfactory evaluation proceed to next Information Sheet. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to pervious Learning Activity.
7. Submit your accomplished Self-check. This will form part of your training portfolio.
8. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
9. Accomplish the all Self-checks.
10. After you accomplish self check proceed to operation sheet if available.
11. If you perform operation procedure correctly proceeds to LAP. test if available

Learning out comes (objectives): At the end of this module the trainee will be able to:-

- Group Samples with similar testing requirement



- Distribute Samples to each department and maintaining sample integrity
- Distribute Request forms
- Check samples and request forms are received by laboratory personnel

Information sheet -1	Group Samples with similar testing requirement
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6. 1. Group Samples with similar testing requirement

The diagnostic laboratory is divided into distinct sections that's separate the types of tests performed based on the sample type and the intended result.

The major sections of the laboratory and their functions are:

- Reception section:
Receive all types of samples (urine, stool, blood, sputum,...etc)
- Clinical Chemistry section
The clinical chemistry section performs hundreds of quantitative analysis on a variety of body fluids. Common chemistry procedures include testing for glucose, cholesterol, hormones, and electrolytes.
- Immunology/Serology section
Immunologic/serologic testing evaluates antibodies and/or antigens that may be indicative of many types of infectious diseases. This is important in not only confirming a diagnosis, but also in treating and managing various conditions.
- Coagulation section
Coagulation procedures are performed to identify possible bleeding or clotting disorders. Coagulation testing is also used to monitor anticoagulant therapy.
- Hematology section
The hematology section performs tests that are important in diagnosing many disorders such as anemia and leukemia,
Whole blood and body fluids are analyzed electronically and examined microscopically for abnormal cells and diseases of the blood
- Microbiology section
The microbiology section identifies microorganisms that may be causing disease (pathogens). The microbiology department also provides information regarding appropriate antibiotics to use as treatment for various pathogens.
- Urinalysis section
The urinalysis section screens urine samples for evidence of kidney disease or bladder infections.

The diagnostic laboratory is equipped with devices, instrument and chemicals (reagents),----etc for performing experimental tests research activities and investigative procedure.





Information sheet -2	Distribute Samples to each department and maintaining sample integrity
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6.2. Distribute Samples to each department and maintaining sample integrity

Phlebotomists will distribute specimens to the appropriate sections. Communication will be given to the Technologists of priority-STAT, Timed Specimen, or routine.

The laboratory will perform the testing in the most efficient manner. Most testing will be done as soon as possible when received. A few tests are performed in batches

- emergency room orders

All emergency room lab orders will be collected and processed STAT.

The order will be given a priority of STAT at the time the order was placed in the Order Entry system. The labels will print on the STAT Label printer in the lab. These results are set to broadcast upon resulting on the Emergency Room printer as soon as they are available. The laboratory can also manually print results from ER specimens to the Emergency Room printer. This helps ensure that all laboratory testing ordered on patients from the Emergency Room will be reported in the E.R. This is especially important when an Emergency Room patient has been admitted to the hospital.

The laboratory will maintain ordering information for all emergency room patients for at least 2 years through the computer system.

- Outpatient laboratory testing

Outpatient laboratory services will be rendered to any outpatient upon presentation of a physician's order. Orders can be faxed or written and obtained for laboratory records, including the name and address of the physician or authorized person ordering the laboratory tests, diagnosis or clinical symptoms, how the testing is to be billed, all pertinent patient information, tests required, and physician's signature. All outpatients will be drawn in the Outpatient Drawing areas.

All outpatient request forms that are received in the Outpatient area contain the following information that is retrieved from the Laboratory Outpatient Requisition or a patient demographic sheet from the physician office:

The patient's name and Date of Birth

- ✓ Patient demographic information such as phone number, address, and Social Security number and/or Medicare/Medicaid number.
- ✓ The physician's name and address.
- ✓ Clinical symptoms or diagnosis.
- ✓ How tests are to be billed.
- ✓ What tests are ordered?
- ✓ The physician's signature.



All applicable patient demographics are entered into the system. All outpatient laboratory tests are ordered in the computer. The date and time of collection is also entered. The computer generates the patient's identification number and the specimen number for the tests ordered.

A phlebotomist will collect the specimen and deliver it to the Main Laboratory and enter the time received.

Results of outpatient tests are auto-faxed or manually faxed to the physician's office. Some results are printed and placed in physicians' boxes.

The lab will maintain a copy of the requisition or the printed Nursing Home Order for at least two years

- no-patient laboratory testing

No-patient laboratory testing is the testing performed on properly labeled and collected specimen from all physician offices and clinics, all Home Health Agencies, and any other caregiver that can provide such specimens. These specimens must be ordered by providers authorized by law to order Laboratory testing.

The specimens must be drawn in properly labeled specimen containers and the proper container for each test that is ordered. Flow of specimen is the same as outpatient and inpatient.

The time and date the specimen is collected and received is entered into the computer.

These specimens are brought to this lab by way of several couriers or individual home health nurses. In-house couriers and home health nurses are trained in specimen transport. The specimens must be accompanied by a signed request by an authorized healthcare provider. In the case of nursing home patients and/or home health patients, the signature resides on the patient chart at the home health or nursing home. Laboratory staff can no longer accept telephone orders; however, they can clarify orders via telephone with read-back and verify. The order can be faxed, but must be written.

As soon as the specimen arrives in the lab, the Laboratory staff must note the date and time received. When the patient is registered into the system and the tests are ordered, the date and time of receipt will then be entered into the computer. Couriers of specimens document the delivery time of the specimen on our specimen log.

Anyone receiving specimens must verify that the specimen was transported correctly and that the time and date of collection in correlation with the time and date of receipt in the Laboratory still constitute an acceptable specimen. Any unacceptable specimens will not be used for testing and will be reported on the Disposition of Unacceptable Specimens log. The physician's office or clinic is notified in order that they can recollect and resend the specimen. If the office or clinic is already closed by the time we receive the specimen, we use internal communications to inform laboratory staff to make sure the office is informed the next business day that the specimen must be recollected.



All No-Patient orders must be accompanied by a proper requisition or patient demographic sheet with the following information:

- ✓ Name of the patient.
- ✓ Patient's date of Birth.
- ✓ All patient demographic information such as phone number, address, and Social Security number or Medicare/Medicaid number.
- ✓ Physician's or Care giver's name and address.
- ✓ Time and date specimen was drawn.
- ✓ Time brought to the lab should be noted by laboratory personnel taking specimen from the courier.
- ✓ Tests that are ordered.
- ✓ Clinical symptoms and symptoms or diagnosis.
- ✓ How tests are to be billed. (To: the patient, insurance, the physician or client, or Medicare /Medicaid.
- ✓ The physician's name and information
- ✓ Whether the patient is male or female.
- ✓ Whether the patient is fasting or not, if applicable.
- ✓ Must include any specific clinical information if applicable for certain testing, such as prenatal screening tests, semen analysis, etc.

_If specimen is unacceptable and cannot be used for testing; the disposition of that specimen is documented on the Disposition of Unacceptable Specimens log. The appropriate office/provider/ home health is contacted about the unacceptable specimen.

_If the specimen is billed as an Industrial billing, the requisition is maintained for 10 years, as these are not maintained in HIM.

- verbal orders:

Any time a physician or physician's office calls and adds tests to a previous requisition, or needs to give a new order, the office must be able to fax a written order, immediately. we can no longer accept verbal orders, except from nursing homes and then we must have a faxed order or write the order on our form.



Information sheet -3	Distributing Request forms
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6.3. Distributing Request forms

Request forms are important means of communication between physicians and diagnostic service providers. Pre-analytical errors account for over two thirds of errors encountered in diagnostic service provision. The importance of adequate completion of request forms is usually underestimated by physicians which may result in medical errors or delay in instituting appropriate treatment.

All requests for routine laboratory procedures for Inpatients, Emergency Room patients, Observation patients, and Day surgery, and skilled bed patients must be requested through the Order Entry System. All Order Entry request labels contain the patient name, Date of Birth, hospital identification number, medical record number, physician, patient's room number, the date and time the test is to be done, and the tests ordered.

Order Entry requests automatically flow to the laboratory module. When the orders are placed, Labels/Orders automatically print in the laboratory. A specimen number is assigned per specimen at the time the labels print. These specimen numbers are used to enter results and track that particular specimen. The time the specimen is collected and received is entered into the computer when brought to the lab.

Requisitions for STAT procedures are sent through the Order Entry System. Nursing units should order those tests with the STAT priority.

All specimens not collected by laboratory personnel will also be ordered through the Order Entry system. When the order is placed, properly answered queries will cause the specimen label to print at the ordering site instead of in the lab. The specimen must always be labeled in the presence of the patient and is sent to the lab for testing. The date and time, if applicable, that the specimen is collected, should be noted. Time received is entered into the computer when personnel in the laboratory receive the specimen.

The laboratory will maintain requisition/Order Entry information for at least 2 years through the computer system.



Information sheet -4	Check samples and request forms are received by laboratory personnel
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6.4. checking samples and request forms are received by laboratory personnel

Test requisition forms will be provided when ordering tests through the lab. Forms for urine specimens are different from the oral fluid test request forms. Please use the appropriate form for the specimen type being sent.

The sample cannot be processed without the information supplied on the test request form. If the test request form does not accompany the specimen, testing will be delayed.

For each specimen, the form should be completed with a water-resistant marker, such as a blue or black ball point pen (red color is not recommended since it tends to rub off).

- urine d screen type

Check the box indicating the reason the donor is being tested and note the temperature of the specimen.

- Security seal after completing the form, place the security seal over the top of the cap, down the sides of the bottle.

Have the donor initial the security seal.

- specimen label

Indicate the following information on the label:

- ✓ Please indicate which test(s) or panel is to be ordered by placing a check mark in the appropriate box or by writing the test on the "other" line. Specific tests should be written on the request line.
- ✓ donor identification, collection date, and collector
- donor information & collector verification

The donor will enter his/her signature, printed name, date collected and donor id. The collector will verify the information provided by the donor and validate that the specimen was collected correctly.

- specimen label
- ✓ indicate the following information on the label:
- ✓ date that the specimen was collected
- ✓ donor identification § collector identification
- test requested
- ✓ Please indicate which test(s) or panel is to be ordered by placing a check mark in the appropriate box or by writing the test on the "other" line.
- ✓ Specific confirmation tests should be written on the request line.





- Chain of laboratory

Indicate the following information on the chain of custody section of the label:

- ✓ Date that the specimen was collected
- ✓ Collector initials § collector comments
- ✓ Do not put test requests in this section



Self-Check 1	Written Test
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Answer the Following Questions (2 point each):

1. What is the type of order will be given a priority of STAT at the time the order was placed in the Order Entry system
 - A. Emergency
 - B. Verbal
 - C. Outpatient
 - D. No patient laboratory
2. Laboratory requests for laboratory procedures for Inpatients should include
 - A. patient name
 - B. Date of Birth
 - C. Hospital identification number
 - D. Medical record number
 - E. AI
3. Laboratory Test requisition forms should be provided by Laboratory personnel when ordering tests through the lab (True/False).
4. Outpatient laboratory services will be rendered to only emergency upon presentation of a physician's order (True/False).
5. If the test request form does not accompany the specimen label what measure do you take?

Note: Satisfactory rating - 10 points Unsatisfactory - below -10 points

You can ask you teacher for the copy of the correct answers

Answer Sheet

Score _____
Rating _____

Name: _____

Date: _____

Short Answer Question

1. _____

2. _____

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