



دائرة المختبرات الطبية و علم الأمراض
Department of Laboratory Medicine and Pathology

LABORATORY SPECIMEN RECEIVING, HANDLING, AND TRANSPORTATION

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I: SPECIMEN HANDLING AND RECEIVING :

1. PURPOSE:

1.1 The objective of this Standard Operating Procedure (SOP) is to describe the necessary stepwise procedures relevant to transporting, receiving and handling of specimens submitted to the Specimen Receiving Section in the Department of Laboratory Medicine and Pathology (DLMP) from all HMC Inpatient, Outpatient facilities, Women's Hospital, and other outside sources, like Primary Health Care Centers (PHCC), Non-HMC Clients.

1.2 This SOP aims to maintain patient confidentiality, prevent sample mix up and ensure Specimen integrity and overall quality handling of specimen; consequently, ensuring quality Lab test results are being produced by HMC DLMP.

1.3 This SOP will be in compliance with the International College of American Pathologists (CAP) standards and HMC Management of Laboratory Specimens Policy CL 7067.

2. DOCUMENTATION:

2.1 Rejection Sheet.

2.2 Sample Transportation Policy

2.3 Log Books:

- 2.3.1 Molecular Biology
- 2.3.2 Cytogenetic
- 2.3.3 Molecular Genetics
- 2.3.4 Private Clinics
- 2.3.5 NCCCR Flow cytometry
- 2.3.6 VVIP Blood Samples
- 2.3.7 Labeling Irretrievable Specimen as required
- 2.3.8 HGED log book
- 2.3.9 Thyroglobulin, H.Pylori Stool (Al Wakra)
- 2.3.10 Mobile Doctor's samples (Chemistry & Hematology)

2.4 Cerner Samples-Transfer List:

- 2.4.1 Cerner Tracking
- 2.4.2 Virology & Molecular Biology
- 2.4.3 Immunology & Histocompatibility
- 2.4.4 Cytogenetics
- 2.4.5 Molecular Genetics
- 2.4.6 TB samples
- 2.4.7 Metabolic (Amino acid)
- 2.4.8 Chemistry & Hematology (Stat samples)
- 2.4.9 Special Chemistry
- 2.4.10 Microbiology (Corneal specimens & Eye swab for one month old babies, All Body fluids)

3. SPECIMEN REQUIREMENTS: (Collection, Handling, Transportation & Storage);

3.1 The phlebotomists or nurses should receive a request form or Cerner electronic request filled with required patient identification data: full name, date of birth, health card number, and nationality and Qatar ID number .They should identify the patient against the mentioned information in the Request form **before** collecting specimens, as per Patient Identification Policy CL 7026.

- 3.2 Laboratory samples or specimens should be properly collected by the nurse or phlebotomist, identified and transported from patient care areas and received by the Central Processing and Specimen Receiving Laboratory.
- 3.3 Handling and transportation of specimens should be in accordance with the Infection Control standards of Practice, with special reference of categories of Isolation precautions as specified in Policy CL 7233.
- 3.4 The Central Specimen receiving and Processing staff receive specimens along with paper-based request from (non-Cerner site) and register/log-in in Cerner PathNet (LIS) and print barcode with requested test name. Specimens then checked for integrity and correctness for test ordered; sorted and distributed by lab aides/trained drivers of DLMP specimen transport vehicles to analytical laboratories with transfer list (for labs that are outside of HGH) or electronic log-in (HGH labs) for sample tracking. Specimens that are arriving with Cerner PathNet barcoded stickers with test names and required information logged-in here only; then sorted and distribute to respective analytical labs by lab aides/drivers as mentioned.

4. EVENTUAL PROBLEMS OR PITFALLS:

- 4.1 Non-Cerner & Cerner Specimens delivered to the Central processing and specimen receiving laboratory are rejected for the following reasons:
 - 4.1.1 The specimen received without patient identification label or unlabeled.
 - 4.1.2 The specimen label does not match the label on the attached request form or mislabeled.
 - 4.1.3 Request form or Label with insufficient information.
 - 4.1.4 Request form has no physician stamp and/or signature.
 - 4.1.5 Request form received with no mark on the required test.
 - 4.1.6 Specimen is collected in improper container or tube.
 - 4.1.7 General or unspecific tests names mentioned in the request form.
 - 4.1.8 Leaking or contaminated container.
 - 4.1.9 Wrong request form or wrong requested test that is not related to the request form type.
 - 4.1.10 Request form received without specimens and vice versa.
 - 4.1.11 Test requested is not available.
 - 4.1.12 In complete stickers for Cerner specimen.
 - 4.1.13 Receiving more than single specimen in one biohazards bag.
 - 4.1.14 Wrong Encounter, Canceled order specimens, Wrong order by doctors & Stickers of completed orders.
 - 4.1.15 Receiving dispatched samples should be corrected at the same time.
 - 4.1.16 Receiving one sample with more than one accession number.
 - 4.1.17 Re-labelling of mislabeled specimen should not be entertained or allowed on a routine basis. Exceptions are when the specimen is extremely difficult to collect, for example CSF, tissue, blood from infants and premature babies. If relabeling allowed, the collector is required to attend Central Processing and relabel samples as required. At this juncture the cause of sending mislabeled sample is identified with the date, time signature and corporation by completing form PCR_PM_001_006_000 Labeling of Irretrievable Specimens.
 - 4.1.18 For inpatients the laboratory staff shall inform the Head Nurse/Charge Nurse/Staff Nurse of the unit of the reason for rejection as soon as possible, who shall in turn inform the requesting physician and a new specimen shall be ordered and collected if needed.
 - 4.1.19 For outpatients respective phlebotomy / technologist area shall be informed who in turn will inform the ordering physician about the rejection and make the arrangement for re-collection, if necessary (inpatients and outpatients communications should be documented in the log-book or online system

LIS).

- 4.1.20 A rejected specimen should be documented in the rejection log sheet or electronically with the reason for the rejection. All available information related to the specimen, date and time of rejection, signature of the laboratory staff and the action taken should be mentioned.
- 4.1.21 All rejected samples are reported electronically by filling up an “Occurrence Variance Report” OVA with 24 hours.

5. STEP BY STEP PROCEDURE;

5.1 Non Electronic System:

- 5.1.1 All specimens should be properly collected, identified from patient care areas and received by Specimen Receiving section.
- 5.1.2 Specimens are usually transported to the Specimen Receiving in a rack or in individual biohazard plastic bag in a specimen transportation box accompanied by a request form.
- 5.1.3 When Specimens have arrived at the Specimen Receiving area the following steps must be taken:
- 5.1.3.1 The specimen receiving staff receives the specimen and checks for any leakage.
- 5.1.3.2 The specimen receiving staff removes the sample from rack or plastic bag.
- 5.1.4 Check specimen label against the request form. The request form should be fully completed with the following information:
- 5.1.4.1 Patient’s full name and HC number.
- 5.1.4.2 Patient’s date of birth and sex.
- 5.1.4.3 Date and time of collection.
- 5.1.4.4 Type of samples or specimen.
- 5.1.4.5 Location and telephone number.
- 5.1.4.6 Adequate clinical data.
- 5.1.4.7 Test required.
- 5.1.4.8 Physician stamp.
- 5.1.4.9 Identification of specimen for STAT tests.
- 5.1.4.10 Collector name, signature & Corp.#
- 5.1.5 All routine Specimens should be accepted daily during regular hours. Specimens also are accepted out of regular hours for storage and sending later to designated laboratory sections.
- 5.1.6 Chemistry Endocrinology, routine samples are registered at HGCP from 7:00AM-4:00PM. Any samples received after 4:00PM, the registration will be at Chemistry Lab.
- 5.1.7 Stat chemistry samples are registered at Chemistry Lab
- 5.1.8 Time stamp the request forms.
- 5.1.9 Virology samples are registered from 7:00AM-4:00PM, at HGCP. Any samples received after 4:00PM, the samples are kept at HGCP refrigerator for the next day morning registration
- 5.1.10 Molecular Biology samples are sent to Virology lab for registration
- 5.1.11 Microbiology Samples are registered from 7:30AM-3:30PM at HGCP. Any urgent samples received after 3:30PM, the registration will be at Microbiology lab. As for routine samples received after 3:30PM, the registration must be done the next day at HGCP.

- 5.1.12 Immunology and Histocompatibility samples are registered at HGCP from 8:00AM-4:00PM. Any samples received after 4:00PM, the registration must be done next day morning at HGCP.
- 5.1.13 STAT tests should be accepted 24/7 and processed accordingly.
- 5.1.14 Arrange all specimens in the racks.
- 5.1.15 Send all samples and specimens by lab aides or drivers to all the designated laboratory sections.
- 5.1.16 STAT Samples from Outpatients:
 - 5.1.16.1 Phlebotomy staff should beep specimen receiving lab for STAT samples.
 - 5.1.16.2 Lab aide should collect the specimen from OPD and deliver it to HGCP within 15 minutes, using Transport boxes.
 - 5.1.16.3 Technician or Assistant technician should check and register the STAT sample in the "OPD STAT" Book.
 - 5.1.16.4 Then submit it to the concerned section immediately.

5.2 Electronic System (Cerner):

- 5.2.1 Check the Cerner sticker if the test and sample are matching with the container/Tube
- 5.2.2 Make sure that the Encounter (Should be in HG)
- 5.2.3 Make sure the sample is stat or routine
- 5.2.4 Make sure status of each specimen is "Collected"
- 5.2.5 Log in all specimens.
- 5.2.6 Specimens have to be rejected if the status is shown as "Dispatch" and follow the criteria of rejection (4.1).
- 5.2.7 Identify "STAT" specimens and send within 10 min. to the individual labs concerned by lab aids.
- 5.2.8 Sort all specimens according to the section where they should be delivered
- 5.2.9 Create Transfer List for Metabolic lab, Cytogenetic, Virology & Molecular Biology, Molecular Genetics, Immunology & Histocompatibility, TB Lab, STAT Chemistry Lab (All samples received with ice, ketones, all Microtainer samples including routine orders), Microbiology (All body fluids, Corneal specimens, Eye swab for babies that are one month old, Special Chemistry, STAT Hematology and Qatar Bio-bank (Pre-marital samples).
- 5.2.10 Send routine specimens by lab aids to the concerned labs.
- 5.2.11 Collect Transfer List from Cytogenetics, Molecular Biology, Immunology, Histocompatibility, TB, STAT Chemistry, Microbiology and Special Chemistry Labs after ensuring that the same has been acknowledged with signature, date and Corporation Number by the Technician.

5.3 Sections (Exceptions):

- 5.3.1 **Chemistry and Special Chemistry:**
 - 5.3.1.1 All urine specimens received after 12pm should be stored in the Chemistry refrigerator from Friday to Wednesday. And on Thursday, the samples received after 1:00PM should be stored at Chemistry refrigerator till the next day.
 - 5.3.1.2 **Note:** STAT urine specimen should be sent immediately to Chemistry Lab with transfer list, after 02:00PM.
 - 5.3.1.3 Blood Gas Specimens Venous Blood Gas received from OPD should be delivered directly to HGED lab by HGCP Lab Aide.
 - 5.3.1.4 Rapid PTH from operating theatre should be requested by physician and/or nurse and delivered directly to Chemistry lab. If sample delivered to central processing incorrectly sample should be rerouted directly to chemistry.

- 5.3.1.5 Cryoglobuline test send directly to Special Chemistry lab directly.
- 5.3.1.6 All special Chemistry samples received from 2:00PM – 06:00AM should be sent to Chemistry Lab.
- 5.3.1.7 Outpatient with request for Cryoglobulins test:
 - 5.3.1.7.1 Patients go to OPD Phlebotomy area to receive appointment.
 - 5.3.1.7.2 Phlebotomy staff must call special chemistry lab to arrange appointment for patients.
 - 5.3.1.7.2.1 Phlebotomy staff should inform the patient to come to the Lab half an hour before their appointment.
 - 5.3.1.7.2.2 Once patient arrives for blood collection, phlebotomist must call the Special Chemistry lab to arrange for flask. Once the flask is ready, the phlebotomist will call HGCP at Tel. numbers: 2040/3180/ to send lab aid to Special Chemistry in order to take the flask.

5.3.2 **Microbiology:**

- 5.3.2.1 Create transfer list for Non Cerner & Cerner samples, All body fluids, Corneal specimens and Eye swabs of babies that are one month old and sent to Microbiology Lab at the same time. The Technical Staff in the Microbiology Lab must sign the book or transfer list upon received and send it back to HGCP for filling.
- 5.3.2.2 All Health Centers and other Non-HMC Clients (Army, Police etc.) microbiology specimens must be sent to Al-Khor Hospital, except fungal and TB samples.

5.3.3 **Blood Bank:**

- 5.3.3.1 All inpatient, Private Hospitals have to be directly delivered to the Blood Bank section.
- 5.3.3.2 OPD, PHCC and Non-HMC Clients' specimens must be received at HGCP and sent to Blood Bank after time-stamping the request forms.

5.3.4 **Histopathology:**

- 5.3.4.1 All specimens should be delivered directly to Histopathology lab up to 3:00PM. After 3:00PM and during weekends, the specimens have to be stored at room temperature in HGCP.
- 5.3.4.2 Frozen sections should be delivered directly to Histopathology Laboratory.
- 5.3.4.3 For all Histopathology specimens without Formalin (Fresh or Normal saline sample) must be stored at specimen receiving refrigerator, temp. (2-8°C) and must contact On Call technician or supervisor of Histopathology Lab.
- 5.3.4.4 All urgent/stat samples received at HGCP after 3:00 PM and weekends must contact on call technical or supervisor of Histopathology.

5.3.5 **Molecular Biology:**

- 5.3.5.1 During working days Blood specimens received after 1:30 PM must be stored at HGCP refrigerators.
- 5.3.5.2 Respiratory and CSF samples must be stored in HGCP refrigerator after 8:00PM.
- 5.3.5.3 Respiratory specimens received during weekends after 8:00 PM specimens must be stored in Specimen receiving refrigerator and registered in the Logbook or Transfer List.

- 5.3.5.4 Blood samples during weekends must be stored at HGCP refrigerator up to Sunday morning.
- 5.3.5.5 Create Transfer List for all Cerner samples.

5.11.3 Virology, Immunology and Histocompatibility

- 5.11.4 Samples received after 1:00 pm must be stored in Specimen receiving refrigerator until 07:00 next morning.
- 5.11.5 Preparing transfer list for all samples

5.11.6 Cytopathology samples

- 5.11.6.1 All Cytopathology samples received at HGCP should log in at HGCP except from PHCC received it without log in the sample at HGCP and forward it to Cytopathology lab.
- 5.11.6.2 Specimens received after 2:30 pm must be stored in Specimen receiving refrigerator.
- 5.11.6.3 CSF or stat samples received at HGCP up to 2:00PM. after 2:00PM, HGCP staff should inform Cytopathology lab either to send the sample to Cytopathology lab or stored the specimen at HGCP.

5.11.7 Molecular genetics:

- 5.11.7.1 Samples should be registered in Logbooks.
- 5.11.7.2 During week days specimens delivered to Molecular Genetic Lab (QRI) at 8:30AM and 12:30PM.
- 5.11.7.3 During off days specimens stored at specimen receiving refrigerator
- 5.11.7.4 Prepare log book for Non-Cerner samples and transfer list for Cerner samples

5.11.8 Cytogenetics samples

- 5.11.8.1 If specimen received after 02:30PM, technical staff should inform the Cytogenetic lab either the sample has sent to the lab directly or stored at specimen receiving refrigerator. After 03:00PM, the sample should be stored in HGCP refrigerator till next day morning 07:00AM.
- 5.11.8.2 Bone Marrow samples from (Oncology) ON CP should be delivered directly from ON CP to Cytogenetics Lab without having to pass through HGCP.
- 5.11.8.3 Prepare log book for Non-Cerner samples and transfer list for Cerner samples.

5.11.9 Metabolic Lab samples:

- 5.11.9.1 From Sunday to Thursday at 7:00-8:00AM and 10:00AM-11:00AM, Metabolic Lab Aid received Guthrie Cards for Newborn screenings at specimen receiving area
- 5.11.9.2 Any Guthrie Cards for Newborn screenings received in the afternoon, night and weekends are kept in the Specimen receiving lab at room temperature for the next day.
- 5.11.9.3 All Stat samples must contact technician On Call from Metabolic Lab.

5.11.9.4 From Saturday to Thursday Amino Acid samples sent to Metabolic Lab up to 02:30PM. Any Amino Acid samples received after 2:30PM should be sent to Chemistry Lab for centrifuging the samples

5.11.10 Referral Lab. Specimens:

5.11.10.1 From 7:00AM-5:00PM should receive at HGCP, log in the same at HGCP. Then, the samples send to Referral Lab.

5.11.10.2 Specimens received after 5pm, which need to be centrifuged are sent to the Chemistry lab.

5.11.10.3 After 5:00PM Specimens are stored in Central Processing refrigerator or Freezer.

5.11.10.4 Print out the patient Cerner sticker or write on the Referral Endorsement book.

5.11.11 Premarital samples:

5.11.11.1 Hematology samples:

HGCP must deliver the samples to Hematology lab with a transfer list.

5.11.11.2 Virology samples:

5.11.11.2.1 Morning samples: Delivered at the sample according to the arranged timing until 1:30PM.

5.11.11.2.2 Evening samples: Stored in the receiving lab and sent next day in the morning to virology lab.

5.11.11.3 Molecular Genetic samples:

Premarital samples send directly from Health Centers to Molecular Genetic lab except after 12:30PM stored at HGCP refrigerator 2-8°C.

5.11.12 Hematology samples:

5.11.12.1 All Hematology lab samples are received and logged in at HGCP.

5.11.12.2 Only Hematology Stat samples are sent to Hematology lab with transfer list.

5.11.13 TB samples:

5.11.13.1 All TB samples are received at HGCP and logged in up to 2:00PM. After 2:00PM samples are received at HGCP, logged in and stored at HGCP refrigerator. Next day morning, HGCP technical staff sends the samples to TB Lab.

5.11.13.2 The Routine & Stat samples are sending to TB lab with transfer list.

6. EVENTUAL SAFETY ISSUES;

- 6.1 All samples should be considered potential biohazards high risk and universal precaution should be taken while handling.
- 6.2 All individuals dealing with samples should be wearing Personal Protective Equipment (PPE).
- 6.3 Smoking, eating, drinking and using make-up in the technical work areas are strictly prohibited. Additionally, food should not be stored in technical refrigerators and working area
- 6.4 Use of Laboratory coats is required. Sandals or shoes with open toes or negative heels are not recommended.
- 6.5 Hands should be washed frequently during the day, before and after removing gloves and before leaving the Laboratory.

7. REFERENCES;

- 7.1 Management of laboratory Specimens Policy CL 7067.
- 7.2 Patient Identification Policy CL 7026.
- 7.3 College of American Pathologists, Laboratory General Checklist, Version 25.09.2012, 325 Waukegan roads, Northfield IL 60093-2750, USA.

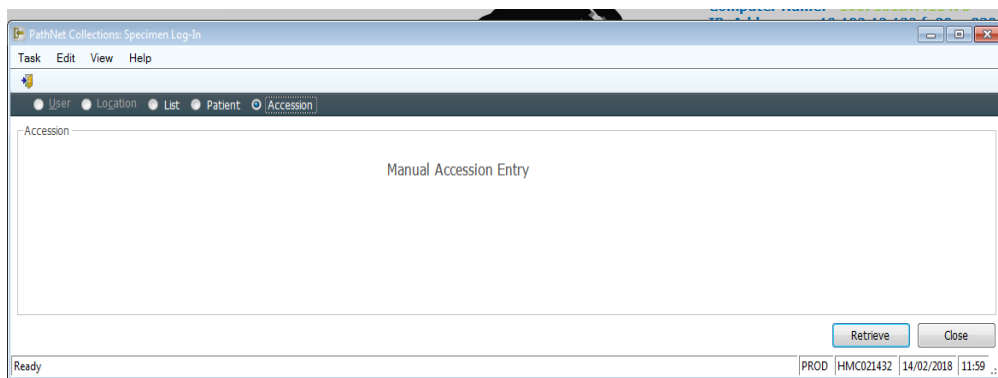
8. NCCCR

1. Flow-Cytometry samples received at HGCP must be logged in and sent to NCCCR along with the log book.

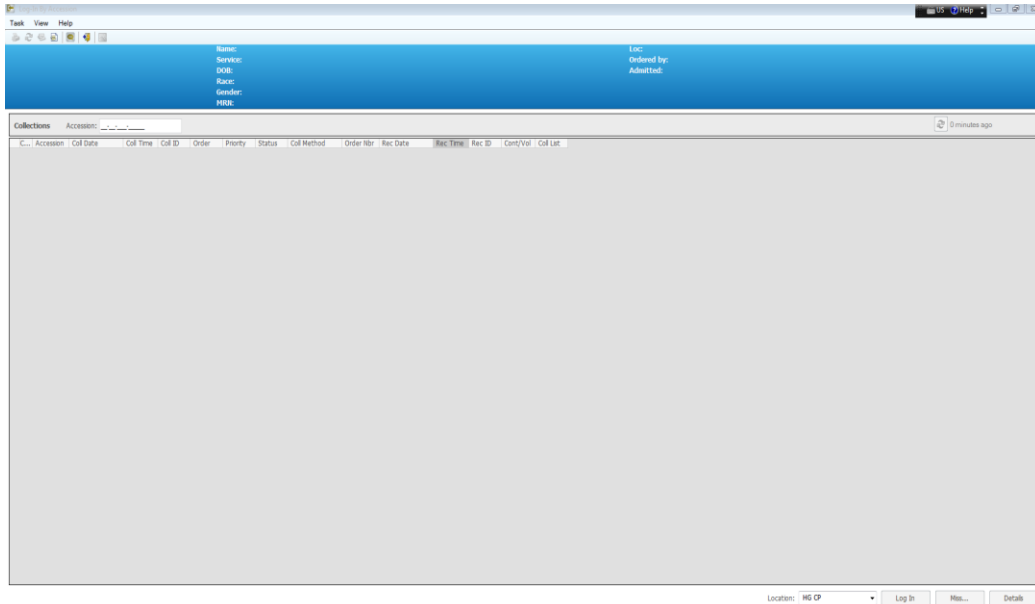
9. APPENDIX;

SPECIMEN LOG IN PROCEDURE:

- Launch the PathNet Collection Appbar.
- Click on log In specimen button.
- Pathnet Collections Specimen Log-In window will appear. Press Retrieve button.

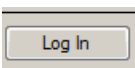



- Log-In by accession window will appear. Make sure that the specimen is properly labeled and location is HG CP. Using a barcode reader, scan the accession number of the specimen received.



- Scan continuously the accession numbers of the specimens received. The status of each sample should read as “collected”.

C...	Accession	Container	Order	Coil Date	Coil Time	Coil ID	Order	Priority	Status	Coil Method	Order Nbr	Rec Date	Rec Time	Rec ID	Cont/Vol	Coil List
<input checked="" type="checkbox"/>	10-18-045-04935	A : 5 mL Green/Gold	CMP	14/02/2018	13:08	HMC048740	CMP	RT	Collected	Venous Draw	---	14/02/2018	14:07	HMC021432	5 mL Green/Gold	---
<input checked="" type="checkbox"/>	10-18-045-04567	A : 5 mL Gold	TPO	14/02/2018	12:59	HMC046863	TPO	RT	Collected	Venous Draw	---	14/02/2018	14:07	HMC021432	5 mL Gold	---
<input checked="" type="checkbox"/>	10-18-045-04499	A : 5 mL Green/Gold	CMP	14/02/2018	12:19	HMC046863	CMP	RT	Collected	Venous Draw	---	14/02/2018	14:07	HMC021432	5 mL Green/Gold	---
<input checked="" type="checkbox"/>			FT4	14/02/2018	12:19	HMC046863	FT4	RT	Collected	Venous Draw	---	14/02/2018	14:07	HMC021432	5 mL Green/Gold	---
<input checked="" type="checkbox"/>			Lipid Panel	14/02/2018	12:19	HMC046863	Lipid Panel	RT	Collected	Venous Draw	---	14/02/2018	14:07	HMC021432	5 mL Green/Gold	---
<input checked="" type="checkbox"/>			TSH	14/02/2018	12:19	HMC046863	TSH	RT	Collected	Venous Draw	---	14/02/2018	14:07	HMC021432	5 mL Green/Gold	---
<input checked="" type="checkbox"/>			Vit D Total	14/02/2018	12:19	HMC046863	Vit D Total	RT	Collected	Venous Draw	---	14/02/2018	14:07	HMC021432	5 mL Green/Gold	---
<input checked="" type="checkbox"/>			Ferritin	14/02/2018	12:19	HMC046863	Ferritin	RT	Collected	Venous Draw	---	14/02/2018	14:07	HMC021432	5 mL Green/Gold	---
<input checked="" type="checkbox"/>			Iron Profile	14/02/2018	12:19	HMC046863	Iron Profile	RT	Collected	Venous Draw	---	14/02/2018	14:07	HMC021432	5 mL Green/Gold	---
<input checked="" type="checkbox"/>			Phosphorus	14/02/2018	12:19	HMC046863	Phosphorus	RT	Collected	Venous Draw	---	14/02/2018	14:07	HMC021432	5 mL Green/Gold	---
<input checked="" type="checkbox"/>			PTH Intact	14/02/2018	12:19	HMC046863	PTH Intact	RT	Collected	Venous Draw	---	14/02/2018	14:07	HMC021432	5 mL Green/Gold	---
<input checked="" type="checkbox"/>			Uric Acid	14/02/2018	12:19	HMC046863	Uric Acid	RT	Collected	Venous Draw	---	14/02/2018	14:07	HMC021432	5 mL Green/Gold	---

- Press the log in button  when scanning of all the received specimens is completed.
- Press the refresh button  from the AppBar to clear the Log In accession window.
- Segregate and distribute the received specimens to differentiate sections for processing.

II : SPECIMEN TRANSPORTATION :

10. PURPOSE:

- 10.1 The purpose of SOP is to explain how specimen transports with appropriate safety, stability, integrity and packaging procedures suitable to specimen type and distance. This is related to transport specimen by lab aides between HGH sites, as well as to drivers who drive and transport specimen between DLMP sites that situated outside the HGH campus. Included certified training for personnel involved with packaging and shipping infectious substances.
- 10.2 This SOP describes the approach for effective and efficient planning and optimizing procedures applicable for both accreditation requirements and quality assurance related to specimen transportation procedures

11. PRINCIPLE:

- 11.1 The DLMP has a written procedure defining the criteria for packaging and labeling the different type of specimen.
- 11.2 The DLMP packages and ships infectious material in accordance with applicable HMC, local, and international regulations
- 11.3 Specimens are transported from HGH and WH to HGH CP directly by hand, out-patient by cart, and thermal boxes, and in-patients by biohazard bags put in closed box with biohazards sign outside.
- 11.4 Specimen received from out-side locations (ex. Rumailah , Heart, NCCCR, Primary Health Centers, others) transported in a thermal box by vehicles.
- 11.5 The DLMP ensures that the person who involved in the transportation of laboratory specimens are trained on appropriate safety procedures suitable to specimen type and transporting distances.
- 11.6 The DLMP has procedures detailing the transportation, handling of patient specimens (blood, body fluids, and tissue) to ensure that all specimens are submitted in an appropriately labeled container with a secure lid to prevent leakage during transporting.
- 11.7 The tracking system allows for documentation of time of dispatch and receipt, as well as condition of specimens upon receipt. An example of an acceptable tracking system is submission of transfer list (prepared by the client or courier) with each batch of client specimens, which may be checked against the specimens received by the laboratory. Some laboratory tests (e.g. Coagulation assays) have time limitations and temperature conditions between collection and analysis. This requirement applies to couriers/transportation systems that are part of the DLMP, not to outside courier systems.
- 11.8 The laboratory services of DLMP have policy in place to monitor quality of submitted specimens and corrective action in specimen transportation, and improving the performance of clients who are frequently submitted specimens improperly.

12. STEP BY STEP PROCEDURE;

12.1 Internal Specimen Transportation Procedure:

- 12.1.1 Trained personnel transfers specimen from OPD phlebotomy labs (Male, Female, Pediatric, WH, Annex, DERMA, TB, RH, HH, and NCCCR Labs) to central specimen receiving (CP) area of DLMP, HGH.
- 12.1.2 Laboratory samples should be properly transported from specimen receiving area to the concerned analytical Sections by laboratory Aide.
- 12.1.3 All carriers (Laboratory Aide) must wear their photo identification badges and uniform.
- 12.1.4 Wear the appropriate personal protective equipment (PPE), like gloves, gown, and closed-toed shoes when packaging for sending and specimen receiving, ensuring that the carrier (laboratory Aide) is not contaminated.
- 12.1.5 Lab Aide should wear one glove in a hand and other hand without; so he can manage his access doors and carrying request forms. Do not wear gloves in both hands considering safe movement of public when transport specimen from specimen receiving to laboratory section and vice versa.
- 12.1.6 Do not touch door handles with gloves.
- 12.1.7 Do not reuse disposable gloves - they are meant for single use.
- 12.1.8 Before starting duty and leave the working area, must clear and wipe the transportation trolley with 0.1% sodium hypochlorite solution.

12.2 External Specimen Transportation Procedure:

- 12.2.1 External Specimen Transportation Service starts from Specimen Receiving area of HGH, AWK and AKH at 6:00 am.
- 12.2.2 Trained drivers from M/s Gulf Warehousing and Tonaco Company transport samples from Specimen Receiving Area to Hamad Bin Khalifa Medical City sites (Cytogenetic, Virology & Molecular Biology, Immunology and Histocompatibility Lab), TB Lab, QRI Lab, Podiatry Clinic, Metabolic Lab, Genetic Center and Molecular Genetic Lab, Al Amal Hospital, Psychiatric Hospital, PEC Al Sadd and OPD Annex using 7 vehicles. Trained drivers from M/s International Technical Parts Company transport samples from Al Wakra Hospital and Al Khor Hospital to Specimen Receiving Area of HGH using 2 vehicles (See Appendix 1).
- 12.2.3 Drivers properly trained for the job also transport special test samples from Al Khor and Al Wakra hospitals to Blood Bank -HGH, and collect samples from Specimen Receiving area, HGH to deliver the same to respective locations.
- 12.2.4 The driver assigned for AKH, collects Health Center urine and stool samples (H. pylori) from HG CP area and then returns back to Al Khor.
- 12.2.5 The availability of M/s Gulf Warehousing, International Technical Parts and Tonaco Company vehicles for 24/7 is as follows:

Time slot	Number of vehicles	Number of drivers
6:00AM-2:30PM	6	6
2:30PM-5:00PM	5	5
5:00PM-2:00AM	6	6
2:00AM-6:00AM	5	5

- 12.2.6 Histopathology samples are delivered directly from AWK to AKH.
- 12.2.7 Laboratory samples should be properly transported from specimen receiving area to the concern sections by trained drivers.

- 12.2.8 Drivers wear an appropriate uniform and work ID at all times during working hours.
- 12.2.9 Monitor temperature inside the specimen transportation boxes and vehicles.
- 12.2.10 Drivers transport samples alone for all locations except ACC- CP (QRI, ACC, and WWRC) where lab aide accompanied drivers to carry boxes with urgent specimens.
- 12.2.11 Specimen should be transported at room temperature (20-25°C) in a specimen box, which should be labeled outside as biohazard, with a fastened lid.
- 12.2.12 Temperature of thermos box should be checked once daily.
- 12.2.13 Do not leave a box containing specimens in an unlocked car. Always enter a facility with carrying a box.
- 12.2.14 Do not touch any specimen bag or container that appears soiled. Ask a laboratory staff to place the specimen(s) in another bag for safe transportation.
- 12.2.15 Drives should not open the specimen transportation box.
- 12.2.16 Each vehicle should have contact device (mobile phone and everybody should familiar with contact numbers), proper air-condition, safety tool box, gloves, emergency outfit, temp monitoring thermometer (temp needs to be recorded at least 4 times in 24 hrs and submitted to transport coordinator in monthly basis for check and sign).
- 12.2.17 All drivers should know how to read and record temp.
- 12.2.18 Log-book that records sending and receiving lab names, date and time to calculate transit time, and driver's name with appropriate persons' signatures.
- 12.2.19 Smoking and Eating are strictly forbidden in the car with or without carrying sample boxes.
- 12.2.20 In case of an accident drivers should contact specimen transportation coordinator immediately.
- 12.2.21 **The following points are applicable for both the above categories (Internal & external specimen transportation)**
- 12.2.22 All samples and/or specimens should be considered high risk and should be carried in a closed transport bag with biohazards sign outside.
- 12.2.23 Transportation of specimens should be in accordance with the infection control standards of practice.
- 12.2.24 Keep transport container appropriately maintained and clean to handle all specimen types.
- 12.2.25 Specimen must be handled in a safe manner up right position in a rack and according to applicable legal requirements or guidance.
- 12.2.26 All specimens must be secured in the appropriate specimen container; ensuring that the lid of the container is properly closed and will not leak.
- 12.2.27 Several specimens can be placed in a thermos box; but to prevent spillage of contents, specimens should not be packed too tightly or too loosely.
- 12.2.28 Blood specimens that are required to be transported on ice (2-8°C) and STAT specimen should be delivered immediately by hand to the laboratory reception.
- 12.2.29 Establishes a good working rapport with the client and is able to communicate effectively.
- 12.2.30 In the event of any spillage, follow the simple steps: S.P.I.L procedure:
- 12.2.30.1 S- Secure the area and wear appropriate Personal Protective Equipment
- 12.2.30.2 P-Protect co-workers, visitors and patients by keeping the are clear
- 12.2.30.3 I- Inform others and fill OVA. Call Control Room telephone number:

- Hamad General Hospital & Women's Hospital :(4434) 2333
- Al Khor Hospital: (4474) 5455

12.2.30.4 L-Leave clean up to occupational health and safety officer, particularly important for large spills

12.2.31 Perform hand hygiene techniques (washing and rubbing) before and after putting gloves and when appropriate

13. LIMITATIONS OF THE PROCEDURE;

- 13.1 Shortage of laboratory aide.
- 13.2 Shortage of thermo boxes or packaging box for specimen transportation
- 13.3 Uncontrolled temperature during summer time especially.
- 13.4 Increase number of trips because of sudden shortage of reagents, pandemic, or holidays.

14. EVENTUAL SAFETY ISSUES;

- 14.1 Specimen containers should be placed in a transportation bag placed in a thermo box with proper specimen labeling and paperwork. In all cases, use of appropriate containers and packaging technique for specimens is important as leaking packages may pose a health hazard
- 14.2 Precautions should be taken when handling and transporting samples and /or specimens to minimize contamination
- 14.3 Wear the appropriate personal protective equipment(PPE)
- 14.4 Be aware in case of any spillage of the specimen
- 14.5 Perform hand hygiene techniques(washing and rubbing)
- 14.6 All carts, Thermo boxes, secondary containers must be labeled with biohazard label
- 14.7 Report any incident to supervisor or designee
- 14.8 Do not touch any specimen bag or container that appears soiled. Ask a laboratory staff to place the specimen(s) in another bag for safe transportation.
- 14.9 Do not put the box down in a spill (wet) area

15. References;

- LMP_PM_001_001_000_02 Process Management
- PCR_PS_001_000_000_01 Competency of Laboratory Services
- PCR_PS_001_001_000_01 Laboratory Services Training and Competency Program

16. ATTACHMENTS/APPENDIXES: 1

SPECIMEN TRANSPORTATION
SUNDAY – THURSDAY
MARCH-2018

DRIVER/ DUTY TIME	SECTION				
Osman 70295114 06:00 am – 02:30 pm	<u>Virology/Immunology</u>			<u>Genetic Center</u>	
	07:30 am	10:00 am	11:30 am	10:00 am	
	01:30 pm	02:30 pm (Only Immunology)		11:30 am	02:00 pm
Chandana 70486750 06:00 am - 05:00 pm	<u>TB Lab</u>	<u>PEC Al Sadd</u>	<u>Metabolic</u>	<u>Virology</u>	
	10:00 am 11:30 am 01:00 pm 02:00 pm	07:30 am 11:00 am 02:00 pm	08:30 am 10:00 am 11:30 am 01:00 pm	05:00 pm	
Mustafa 70486838 06:00 am - 05:00 pm	<u>TB Lab</u>	<u>Psychiatry</u>	<u>OPD Annex</u>		
	06:30 am	10:00 am 01:00 pm	08:00 am 09:30 am 11:00 am 12:30 pm 02:30 pm		
Saber Ali 70486839 05:00 pm – 02:00 am	<u>Virology</u>	<u>OPD Annex</u>	<u>PEC Al Sadd</u>	<u>ACC</u>	<u>Podiatric</u>
	08:00 pm	(Evening Clinic) 07:30 pm 09:30 pm	05:00 pm 01:00 am	05:30 pm	08:30 pm Sunday, Tuesday & Wednesday
Alavudeen #66284540 & Tanib#50599865. 06.00 am—06.00 pm <u>ACC</u>				Binod 70486981 08.00 pm—06.00 am	
07:30 am 08:00 am 08:30 am 09:00 am 09:30 am 10:00 am 10:30 am 11:00 am 11:30 am 12:00 pm 01:00 pm	01.30 pm 02.00 pm 02.30 pm 03:00 pm 03:30 pm 04.30 pm 05.00 pm 06.00 pm	Akthar#55178442 06.00 pm—06.00 am <u>ACC</u> <u>PEC AL Sadd</u> 06.30 pm 02.30 am 07:00 pm 05.30 am 07.30 pm 08.00 pm 08.30 pm		09:00 pm	<u>PEC Al Sadd</u> 10.00 pm 11.30 pm 04.00 am
Sunil 70486797 07.30 am—05.00 pm	AL AMAL HOSPITAL		ACC	Molecular & Cytogenetic	
	08.00 am 08.45 am 09.30 am 10.15 am 11.00 am	11.45 am 01.00 pm 02.15 pm 03.00 pm	12.30 pm 04.00 pm	07.30 am 10.00 am 11.30 am 01.30 pm 02.30 pm	