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Prepared and Issued By :	**Quality Department**
Reviewed By :	**Name : Mr. SAM MATHEW** **CHIEF OPERATING OFFICER** **Signature :**
Approved By :	**Name : Dr. DINESH KUMAR M K** **DEPUTY MEDICAL SUPERINTENDENT** **Signature :**

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AMENDMENT SHEET

Sl. no	Section no & page no	Details of the amendment	Reasons	Signature of the preparatory authority	Signature of the approval authority

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Preparation	Approval	Issue to
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Sl. No.	Designation
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CONTENTS

1. POLICY AND PROCEDURE ON SCOPE OF SERVICES

1.1 Purpose

To provide the list of services available in this hospital.

1.2 Scope

All Front office staffs & PRO's

1.3 Responsibilities

Chief operating Officer is responsible to apply this policy.

1.4 Policy

The following are the services provided at Malabar Medical College, Ulliyeri.

1.5 Clinical Services

1. General Medicine
2. Critical care Unit – ICCU, MICU, HDU, SICU, PICU, NICU, HDU, NEURO ICU
3. Emergency Medicine
4. General Surgery
5. Obstetrics and Gynecology
6. Paediartics & Neonatology
7. Orthopaedics
8. Anaesthesiology
9. Dermatology and Cosmetology

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10. Psychiatry
11. Pulmonology
12. Ophthalmology
13. ENT
14. Dentistry
15. Physical Medicine and Rehabilitation
16. Endocrinology
17. Cardiology
18. Cardiovascular and Thoracic Surgery
19. Nephrology
20. Neurology
21. Gastroenterology
22. Surgical Gastroenterology
23. Surgical Oncology
24. Paediatric Surgery
25. Urology
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27. Plastic Surgery
28. Maxillo Facial Surgery

1.6 Clinical Support Services

29. In patient Services
30. Outpatient Services
31. Insurance and Reimbursement Services
32. Ambulance/Mobile ICU Services
33. Optical
34. Blood bank
35. Physiotherapy
36. Psychology Services
37. Deaddiction Services
38. Audiology and Speech Pathology
39. Refraction
40. Dietitian
41. Hospital Infection control department
42. Cath-Lab
43. Operation Theatre
44. Dialysis services

1.7 Diagnostic Services

45. Laboratory Services
46. Clinical Biochemistry
47. Hematology
48. Clinical Microbiology and Serology
49. Clinical pathology
50. Cytopathology
51. Genetics
52. Histopathology
53. Endoscopy Services
54. Bronchoscopy

1.8 Diagnostic Imaging

55. CT scanning
56. Mammography
57. MRI
58. Ultrasonography
59. Digital X-Ray

1.9 Other Diagnostic Services

60. EEG
61. NCS
62. EMG
63. PFT

64. VEP

65. Echo

66. ECG

67. TMT

68. Holter Diagnostic and Therapeutic

69. ECT

70. A Scan

71. OCT

72. Pachymetry

73. Specular Microscope

74. Visual Field Analyzer

75. Retinal Green Laser

76. ND-YAG Laser

77. Fundus Camera

1.10 Support Services (Non Clinical and Admin Departments)

78. Biomedical Engineering

79. Patient care services

80. Pharmacy Services

81. CSSD

82. Maintenance and Engineering

83. Information Technology

84. Medical records Department

85. Marketing & TPA

86. Finance & Accounts

87. Housekeeping

88. Security Services

89. Linen & Laundry

90. Facility management

91. Safety Department

92. Human Resources Department

93. Purchase

94. Stores

95. Mortuary services

96. F & B Department

97. Library

1.11 24 – Hour Services

98. Emergency.

99. Pharmacy.

100. Blood Bank.

101. Laboratory.

102. Diagnostic Imaging.

103. Ambulance/Mobile ICU Services

1.12 Display of Services

The available hospital services are displayed in an understandable language to the local people in Malayalam and also in English. The services details displayed in the front office. PRO is responsible to put the signage's and if any damages replace with a new one. Tariff of room and other basic services of hospital are made available at front office with reception staff/billing staff.

1.13 Staff Orientation

The staff who all are working in front office /reception, billing, laboratory(specify), ED reception staffs are to be get adequate training regarding the policies, scope of services and tariff also. If a new staff joined any one of this department give adequate orientation and training to them and also any changes occurs in policies and tariff. While checking if any lack of awareness is there're orientation to be given. The training which are given to the staff should be recorded in training register.

1.14 Reference

Pre Accreditation Entry Level standards for Hospitals-First Edition: April 2014

2. POLICY AND PROCEDURE ON REGISTRATION, ADMISSION AND TRANSFER AND REFERRAL OF PATIENTS

2.1 Purpose

To define Policy & Procedure for Registration, Admission and transfer of the patients at Malabar Medical College.

2.2 Scope

This Policy & procedure is applicable to all patients who undergoes1) Registration for O P consultation, only for investigation and also for admission & 2) Admission of the patients with any disease, or for any surgery. and3) Transfer in case of non-availability of beds / referral where the required services are not available in Malabar Medical College.

2.3 Registration Process

a. First up all patient approaches to front office staff for consultation, If any emergency situation directly to the ED reception staff.

b. Reception staff should check with patient whether it is patient's first visit or subsequent visit.

c. If it is a subsequent visit recollect the ID number and enter into consultation list by reception staff.

d. The patient who came for first time in this institution, fill the registration form including these data, name, age, sex, address, Phone number, for emergency contact person name and phone number also, Doctor to be seen.

e. If registration detail is not available to the old patient, a new registration number is given to Patient for the consultation.

2.4 Admission

a. For admission the doctor should fill the admission request form which including patient details as well as clinical condition, it should be signed by the concerned doctor, then send it to the admission counter.

b. The admission request will come from the different OPD s and Emergency Department also.

c. All patients who are to be admitted should complete registration process.

d. Billing staff explain the tariff details and availability of type of bed.

e. Patient is admitted based on their choice (excluding ICU cases) and availability of type of beds.

f. At the time of admission, the patient will get a IP number also.

g. If the staff handling registration and admission needs any clarification on the services provided by hospital, they should contact Senior manager operations for necessary information.

2.5 Procedure

a. Patients shall be offered a choice of patient rooms / beds.

b. In case of non-availability of bed, the admission staff informs Chairman to decide on arranging / adding more beds within the available space (converting single room to sharing room) and the concerned treating doctor is informed. In the event of non-availability of the room of choice, the patient shall be allotted the best alternative rooms available.

c. Malabar Medical college has different kinds of room categories such as general ward, single room and deluxe room, isolation room.

d. The concerned treating doctor to decide on postponement or cancellation of admission in coordination with patient.

e. All staff handling registration and admission is to be trained on this Policy and Procedure (New Staff, Changes in duties / tariff plans etc).

2.6 If it is an unknown patient

All possible efforts to be taken by the hospital staff to find the identification of patient; and inform to the police. if admitted, the patient is to identified by the Inpatient number till patient name is identified as appropriate.

2.7 Policy On Non –Availability of Beds

1. Purpose

The purpose of this policy is when patient need admission, but there is no bed available in this institution, the things to be done by the staff.

2. Referral of Patient to Other Centre

If there is no possibility of bed availability or if the patient is not agreeable to be admitted in another class, then the treating doctor is asked to possibility to refer the patient to another center. In case of transfer of patients in a life threatening situation (like those who are on ventilator) to another organization, a doctor / ACLS Trained Staffs accompanies the patient. The ambulance driver helper, male nurse (Trained in BCLS and / or ACLS), or doctor accompany during transfer for unstable Patients to other organizations. There is difference between transfer of stable and unstable patient transfer.

3. Transfer of Stable Patients

Stable Patient is transferred to another organization through the ambulance, accompanied by ambulance driver, helper or by their own vehicle.

4. Criteria for stable patients

Stable patient means his vital parameters are within normal limits that means pulse, respiration, blood pressure, oxygen saturation, and GRBS. And also his level of consciousness within normal limits or slightly reduced.

Procedure

- Ask the patient if they want to go to any specific hospital.
- Prior information given to that hospital, if to the Govt. medical college, no prior information is giving.
- If the patients not giving any specific hospital name, all cases are referring to Govt. Medical college, Calicut.

5. Unstable Patient Policy

a. Definition of Unstable Patient

Patient is conscious, but may be uncomfortable. Indicators are favorable. Serious: Vital signs may be unstable and not within normal limits. Critical: Vital signs are unstable and not within normal limits. Patient may be unconscious.

- A Patient whose vital parameter needs external assistance for their maintenance,
- Low GCS.
- Intubated patients

b. Responsibilities

Emergency physician / Consultant, Front Office staff, Nursing Supervisor, Staff nurse who assigned for that patient (ED / Ward / ICU) are responsible to implement this Policy and Procedure.

Policy

- Patients are admitted at Malabar medical college only if the Hospital can provide the required services to the patient.
- All patients, out-patients, in-patients and emergency who are willing to avail services at Malabar Medical College & Hospital should undergo Registration / Admission process.
- In case of Emergency, the same to be carried out in parallel to treatment.
- When there is no provision to treat the patient in the hospital, primary care given from this institution, then only transfer the patient.
- If the patient not willing to admit /continue the treatment from this institution also transfer the patient according to their wish after taking the consent.

6. Indications for transfer to another facility:

- Burns above 20%.
- Oncology.
- Patient for Transplant.
- No beds are available at all.
- Patient desires to be transferred to another facility

Procedure

- Initial treatment to be given from emergency department according to the needs if the patient came to ED.
- If the patient admitted in ward/ICU the routine treatment as per order continue till the time of reference.
- If any facilities not available in our hospital or patient want to go to another hospital the staff will give the information to concerned doctor.
- The doctor will explain the condition to the patient /relative and need to transfer the patient in Mobile ICU because the patient condition is unstable.
- Inform to the mobile ICU staff, doctor & driver.
- Mobile ICU charge will explain to the bystander by ED PRO.
- The trained staff and doctor will accompany the patient, prior information given to the hospital except government medical college.
- Mobile ICU is fully equipped with life saving equipment's.

7. MLC CASES:

- In case of patients involved in medico legal cases the procedure enumerated below shall be followed.
- The MLC cases registered separately, done from reception.
- There is a separate register which kept in ED to enter the medico legal cases.
- All such Cases are to be informed to the police with an intimation, the intimation written by the doctor and send to the police station by PRO

A list of MLC cases are shown below:

- Poisoning.
- Injury with sharp object / fire arms.
- Burns especially in women.
- Drowning.
- Death / Injury in a woman.
- Road accidents / Industrial accidents.
- Conditions which require notification as per the laws for time being in force.
- Any other conditions where there is a suspicion of some foul play.
- Where the cause of death is not certain.
- Abuse of Children / Women / Elderly
- Sexual Assault

3. POLICY AND PROCEDURE ON PATIENT INITIAL ASSESSMENT & REGULAR REASSESSMENT

3.1 Purpose

- To get a correct data of the patient condition.
- If any deviation from patient condition correct treatment can give at correct time with re assessment.
- To make correct plan of care.
- To assure care provided to patient is based on an assessment of Patient's relevant physical, psychological and social needs.

3.2 Scope

This procedure applies to all Patients treated at Malabar medical college.

3.3 DEFINITION

Assessment: The assessment including patient general condition, history medical, surgical, and allergic, pain score and physical examination also.

3.4 Responsibility

- Treating physician
- Nurses
- house surgeons/junior residents

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3.5 Initial Assessment Policy

- The initial assessment done by the admitting physician at the time of admission and it should be documented within 24 hours.
- The initial assessment done by the nurses within ½ hour after the admission of patient.

3.6 Initial Assessment Procedures

- Initial assessments of Patient at emergency Department are to be carried out by Nurse, immediately, as soon as patient arrives at emergency ward.
- Assessment of Patient in Outpatient department is done by the Consultant. History and Physical examination of the patient is written in the prescription form which is given to patient at the time of registration.
- Initial Assessment for Inpatient to be carried out by Junior resident, Treating Doctor or his / her Team Member (including house surgeon) within one hour of admission and to be recorded.
- Initial assessment should be including present illness, past medical and surgical history, allergy, nutritional status, pain score, physical examination and initial diagnosis also included.
- Nursing Initial Assessment is done within 30 minutes of patient admission into the ward.

3.7 Reassessment

- Reassessment should be done to provide correct treatment at correct time. Timely diagnosis can give adequate treatment and increase the patient prognosis also.
- The doctors should reassess the patient once in a day if he/she admitted in ward and whenever necessary. In Critical care areas two times in a day, if it is a ventilated patient need reassessment every 2nd hourly.
- Nurses should reassess the patient every 6th hourly. NB; All cases are reassessed whenever necessary, if the patient is having any complaint or feeling any discomfort or any deviation in vital parameters should reassess the patient.
- When a Patient is transferred from one setting to another setting. Example: ICU to ward.
- Based on the initial assessment plan of care can be documented. Regular reassessment to be done and documented during the hospitalization of that patient.
- The discharge planning needs to be included in the time of initial assessment and reassessment and family members can also take the decision.
- The reassessment can done by the dietician, physiotherapist also, they can also contribute to the patient plan of care, and discharge plan also.
- At the time of discharge after assessment record that the patient is fit for discharge.

3.8 CONTENT OF THE INITIAL ASSESSMENT

- **Inpatient & Emergency Patient**

The Contents are Complaints, History, examination, Provisional Diagnosis, Investigations & treatment.

- **Outpatient**

Outpatient prescription form named history & physical examination record. As a minimum, following parameters are to be in the Outpatient Prescription Form:

a. Patient name

b. Personal data (like Sex, Age, Height, Weight),

c. Clinical history,

d. Quick examination (as appropriate)

e. Present illness

f. Investigation (if any) and

g. Medications.

3.9 Documentation

a. Assessment and Reassessment are to be documented by

- Doctors
- Nurse

b. Other assessment are performed and documented, as appropriate by

- Dietician
- Physiotherapist

3.10 Records

- Prescription Form – Outpatient
- Inpatient Case Sheet

3.11 Reference

Pre Accreditation Entry Level standards for Hospitals-First Edition: April 2014

4. POLICY AND PROCEDURE ON LABORATORY SERVICES, QUALITY ASSURANCE AND SAFETY PROGRAMME

4.1 Scope of Laboratories

Department Mission:

The mission of our laboratory is to provide superior cost effective, laboratory testing and impact quality customer service in an environment that promote compassionate care and contribute to co-worker satisfaction. We will always strive to meet these goals by continuing to grow and adapt in order to consistently meet the needs of our community, patients and health care system.

4.2 Scope of Services Provided:

Department of laboratory services provide stat routine and special clinical laboratory services for hospital inpatients and outpatient clinic and other referred patients.

A. **Clinical Laboratory Services**: Includes routine and stat specimen collection, hematology & special hematological test eg: Sickling test, coagulation testing, Bone marrow aspiration, Urine analysis, Fluid analysis Clinical pathology consultation, Routine Chemistry, Endocrinology, Electrophoresis, Blood Gas Analysis, Allergic panel tests, Microbiology Immunology, Mycology, Bacteriology, Parasitology, Serology, Virology Therapeutic drug monitoring / toxicology.

B. Other Laboratory Services:

- Management and oversight of point of care testing program (POCT)
- Therapeutic phlebotomies performed with a Physicians order and treatment plan and also inpatient phlebotomy available on request.

4.3 Hours of Operation:

- We operate 24 Hours/day, 7 days / week, 365 days /year*

4.4 Out-patient Phlebotomy

First floor: Monday to Saturday -- 08:00 am to 05:00 pm

4.5 Remaining Hours: Available On Request

4.6 Processing Hematology Specimens

- **Principle**

  This SOP defines the handling of a specimen from the time it is received until the time a report is released from the Hematology & Clinical Pathology Lab.

- **Specimen**

  The specimen received must correspond to the test requested. If it does not, take appropriate action. (See SOP 02: Criteria for Rejecting Laboratory Specimens.)

- **Procedure**

a. Ensure each sample is accompanied by properly filled request form.

b. Ensure all laboratory requests contain the following minimum information: patient's name, age, and gender; attending physician; ward or clinic; OP/IP No, tests requested; date and time specimen was collected; and relevant clinical information.

c. All OP samples should be billed in 1st counter and a token will be given to each of them. The attending clerk should write the same token No on bill also.

d. Patients will be called upon based on their token no, to the front desk. The technician posted there should fill the request forms correctly. A sticker should be put in each request form and note time of sample collection

e. Enter the sample(s) on the register, indicating patient's name, IP/OP number, sex, clinical diagnosis, all tests requested and time of sample collection for that sample.

f. Based on the token no, patients should be directed to sample collection room after retrieving the token in front desk itself. No other person are permitted inside the room. (See SOP for details on sample collection). Patient should give an idea regarding TAT after sample collection.

g. For IP samples determine if the specimen should be rejected. (See SOP 02: Criteria for Rejecting Laboratory Specimens). Note the specimen condition on the requisition slip according to the following:

- Haemolysed - Red-tinged
- Lipemic - "milky"

- Icteric - Yellow-green or "jaundiced"
- Clotted samples.

h. After checking all, a sticker should be put notifying the time of reception of sample. Samples for each sections should separately put in different trays. Signature of ward boys should be taken. At regular periods attender in lab should give these samples to respective sections

i. Once sample are received in appropriate section, time of reception should be noted down in the sticker. Perform analysis of assays on the appropriate analyzer.

j. After performing each test, technician in charge should completely fill the results, initial it with time and send to reporting room.

k. The clerical staff should also initial the report with time and take print out of results.

l. All reports generated will be reviewed and initiated by the technician performing the analysis and countersigned by lab-in –charge.

m. Repeat any assay deemed necessary according to the review guidelines of the procedure. Always repeat a specimen from the original tube (not the sample cup) if quantity is sufficient.

n. Ensure all repeats are included with laboratory report.

o. Notify the medical officer in-charge of any result that is a panic value especially presence of parasites, marked thrombocytopenia, leukemia.

- **Procedural Notes**

a) In order to avoid technical and clerical errors, the same technician should run the specimen and enter the patient identification numbers into the analyzer.

b) Reference values will be indicated on all reports released.

4.7 CRITERIA FOR REJECTING LABORATORY SPECIMENS

- **Principle**

This SOP defines criteria for rejecting various lab specimens.

- **Procedure**

Specimens may be rejected in the following situations:

1. **Mismatched specimens and request forms**:

Processing personnel should contact appropriate location and give them an opportunity to correct the problem within 2 hours for specimen to be processed. A note indicating that correction has been done for processing of the specimen has to be made in case of any discrepancy. If the processor is unable to contact the submitter, the forms and/or specimens can be sent back with a specimen rejection form stating the problem. Ultimately, repeat offenders must be monitored closely with copies of the mismatched forms or specimens provided to the pathologist for follow-up.

2. **Unlabeled specimens**

   The ward /clinic will be notified and requested to identify the sample or to submit another specimen. Otherwise, if no confirmation is forthcoming, the unlabeled specimen(s) will be discarded.

3. **Incomplete label / Request form**:

   All specimens & forms must have the patient's full details. Contact the collector to correct any problems. If no response, process the sample timely if it is appropriate. But withhold the result until responsible person come and correct it.

4. **Requests accompanied by lipemic & icteric specimens**

   Will have the condition noted on the lab result. In addition, when the results are reported by telephone, the condition of the submitted specimen (i.e., lipemic) will be conveyed to the individual receiving the results.

5. **Contaminated specimen or request form**:

   The ward or clinic will be called and provided with the opportunity to submit a new specimen/form.

6. **Improper specimen container for requested assay**:

   Technicians will not perform a test if the specimen is not in the acceptable container purple tops.

7. **Insufficient quantity of specimen submitted for the testing requested**

Contact the physician, ward, or clinic and have the patient's blood redrawn or have the physician prioritize tests requested for analysis; however, this should be highly discouraged.

- **Procedural Notes**
  - Take appropriate action to correct the problem. If necessary, have the specimen re-collected as soon as possible.
  - Document all actions on the request forms or specimen rejection form, indicating the reason for rejection. Include name of the person contacted, date and time of notification, action taken, and initials of person making the notification.
  - Notify the physician if a delay in performing the analysis will occur; this allows him or her to make appropriate decisions.
  - The lab in charge will review all rejected request forms/specimen for each day.

4.8 SAMPLE COLLECTION, LABELLING, HANDLING

1. **Introduction**

This standard operating procedure defines the specimens to be collected, labelling of specimens, handling and transporting of them.

2. **Specimen Collection**

a. Before any sample collection proper identification of patient is a must.

b. Before taking samples, appropriate container should be labelled with name, age, sex, type of specimen, IP/OP NO, and date of collection.

c. Routine laboratory request forms should accompany each sample. Data on laboratory request forms should include name, age, and sex of patient, and date and time of specimen removal.

d. 2 ml of venous blood will be collected for complete blood count using EDTA containing purple tops, per predetermined patient schedule.

Where necessary, peripheral smear will be done using the same sample. For ESR estimation, additional 1.6 ml blood is taken in citrate containing black topped bottles.

e. 5 ml of venous blood will be collected for liver function tests using red tops. All necessary clinical chemistry parameters will be performed using this sample.

f. 4 ml of venous blood will be collected for urea and electrolyte tests using red tops.

g. All necessary renal function parameters will be performed using this sample.

h. For coagulation studies blood will be collected in blue topped bottles and for random blood sugar blood will be collected in ash topped bottles.

3. **Specimen Handling and Shipment**.

- All specimens should be submitted through the main reception area for processing.
- It is the responsibility of the lab in charge to ensure that specimens are submitted correctly to the appropriate section.

4.9 Blood Collection by Venipuncture in Adults and Children

1. **Purpose**

To obtain peripheral blood samples from adults and children needed for laboratory testing, with proper specimen identification and handling, while ensuring patient and staff safety.

2. **Background**

- Obtaining sufficient volume of blood in the proper collection tubes is the responsibility of the phlebotomist.
- It is also the duty of the phlebotomist to ensure that the specimens collected are identified properly and labeled in a legible manner for the laboratory.

- It is the duty of the laboratory in charge to notify if inadequate specimens are received, so that corrective action may be taken if possible.

3. **Materials and Equipment Required**

- Disposable latex gloves
- Isopropyl alcohol
- Tourniquet
- Collection bottles
- Appropriate size sterile disposable needles or butterfly needle set
- Cotton balls
- Sharps disposal container
- Needle destroyer

4.10 Procedures: Adult Phlebotomy

1. All required materials for blood drawing should be assembled before the procedure.
2. Check Requisition Form to confirm the quantity of blood to be drawn and which kind of collection tubes to use.
3. Collection tubes or other specimen containers should be labeled by patient identification number.
4. Be sure to verify the **identity of the OP number** before labeling tubes.
5. Do not prepare tubes for more than one subject at a time.
6. The phlebotomist should wear latex gloves and use aseptic technique. Gloves should

always be worn when handling or transporting specimens if there is any possibility of direct contact with blood or other body secretion.

7. Sterile, single-use needles and collection tubes are to be used for each blood draw, and after completion needles are to be properly disposed of in a puncture resistant container.
8. Explain the blood drawing procedure to the client and reassure him/her.
9. Seat ambulatory patients in a comfortable chair with the extremity from which blood will be drawn supported on a sturdy table or other support. The preferred sites for phlebotomy are the median antecubital and basilic veins of the upper extremity. Veins on the dorsum on the hand and other forearm veins are possible alternative sites. A tourniquet may be used to transiently distend veins prior to blood drawing. Do not leave the tourniquet on the arm for longer than necessary.
10. Using the tip of the index finger examine the phlebotomy site, feel the vein, and decide exactly where to place the puncture.
11. Disinfect the phlebotomy site by swabbing the skin in small outward circles with cotton wool soaked in isopropyl alcohol. Do not touch the prepared puncture site with your fingers after disinfecting the skin.
12. Using aseptic technique, insert the needle into the vein. After drawing, mix the blood in tubes containing additives by inverting the tubes several times.
13. After drawing the required blood samples, release the tourniquet (if used).

14. Remove the needle from the vein; cover the puncture site with a cotton swab, and hold (or have the subject hold) pressure at the puncture site for 3 minutes or until adequate hemostasis is visible.
15. Subjects occasionally feel dizzy or faint during phlebotomy. If the subject complains of dizziness stop the phlebotomy procedure, secure the vessel puncture site and help the subject lie down or sit with his/her head between the knees. Do not allow subjects to stand until they have fully recovered. Summon medical assistance from other clinic staff if necessary.

4.11 Paediatric Phlebotomy Preparation

- Paediatric phlebotomy should be done by persons experienced in paediatric blood drawing to minimize the discomfort of both the mother and the child.
- If sufficient blood is not obtained on the first attempt, a second attempt may be made. If the second attempt also fails and an additional trained person is available, a second person may attempt to obtain the specimen. No more than **three attempts** should be made for any child at a time. If blood is not obtained after three attempts, the child may be scheduled to return on a later date for additional attempts by the most experienced staff member.

4.12 Procedure Paediatric Phlebotomy

- The key to successful blood drawing on children is in the positioning and holding of the child. One should not attempt to draw blood alone, without the aid of a second person to restrain the child. A trained staff member is the ideal person to assist with

the blood drawing. If no staff members are available to assist in the holding, then the mother may be instructed in how to hold the child in the manner that makes the drawing the easiest for the blood drawer. If the mother does not want to be present for the blood rawing, her wishes should be respected and the blood should be obtained by two staff members.

- Blood should be obtained from peripheral veins such as antecubital veins, veins on the dorsum of the hand, and veins on the dorsum of the foot.

  Femoral, jugular, or arterial punctures can be used where necessary if specimens are required for the health and medical care of the child.
- A tourniquet may be used to transiently distend veins prior to blood drawing.
- Using the tip of the index finger, examine the phlebotomy site, feel theve in, and decide exactly where to place the puncture.
- Disinfect the phlebotomy site.
- Using aseptic technique, insert the needle into the vein.
- A butterfly needle combined with a syringe will sometimes work better than syringes. A 23 or 25gauge butterfly needle should be used with 2 ml or 5 ml syringe.

4.13 Safety Precautions

- Always put on laboratory protective clothing and gloves and keep to the laboratory safety practices to avoid viral and other infectious disease transmissions.
- Needles should not be recapped, but should be placed in a proper needle disposal

container immediately.

- Discarded swabs, cotton, and other biohazard but non-sharp objects should be placed in a yellow container lined with an auto clavable biohazard bag.
- Visibly soiled or splashed tourniquets should be discarded in proper containers and new equipment used.
- Any blood spills or splashes should be immediately cleaned up with absorbent material using an approved disinfectant such as dilute 10% bleach.
- Counter surfaces in the phlebotomy work area should be disinfected at least 2 times a day or whenever visibly soiled.
- No food or drink is permitted in the phlebotomy work area.

4.14 Post exposure Prophylaxis

1. **Introduction**

   This standard operating procedure defines the procedures to be followed in the laboratory if an exposure to a potentially infectious material occurs

2. **Universal Precautions**

   - At all times, guidelines for good laboratory practices must be followed to ensure safety and to keep laboratory accidents to a minimum.
   - White coats and gloves should be worn at all times to prevent bodily and

personal clothing contamination.

- After any procedure, gloves should be removed and hands washed immediately at the designated sites.
- Testing of serum or plasma specimens should be performed in such a manner as to minimize any occupational risk.
- Contact of skin or mucous membranes with HIV-infected products should be avoided.
- Surfaces contaminated with HIV-infected products should be immediately disinfected.
- All contaminated waste should be safely disposed of.

3. Procedure

- After exposure to a potentially infectious material, follow these procedure immediately:
- Squeeze the area and discard blood. Wash the areas exposed to potentially infectious material with soap and water.
- Flush exposed mucous membranes with water. If saline solution is available, use it to flush eyes.
- Do not apply caustic agents, including antiseptics or disinfectants, to the exposed areas.
- Immediately inform the lab in charge of the exposure and insist on

completing the **Occupational Exposure Incident Report** in the applicable register.

The following information should be provided:

1. Date and time of exposure
2. Exposure site(s)
3. Where and how the exposure occurred
4. If a sharp object was involved, type and brand of device
5. Type and amount of fluid exposed to
6. Severity of exposure (e.g., depth of sharp puncture, intact skin, eyes)
7. Exposure source
8. Body fluids (e.g., blood products)
9. Patient: If HIV patient, check for HIV status and document whether negative or positive, stage of disease, viral load, history of ART, etc.

- **The laboratory supervisor will refer the exposed personnel to the medical officer in charge of post exposure prophylaxis. The medical officer will evaluate the laboratory health worker for potential exposure of HIV based on:**

1) Type and amount of body fluid / tissue
2) Type of exposure

a) Percutaneous injury

b) Mucous membrane exposure

c) Non intact skin exposure

d) Bites resulting in blood exposure

3) Infectious status of source

a) Presence of HIV antibody

b) Presence of HbsAG

c) Presence of HCV antibody

4) Status of the source of infectious material

a) Presence of HIV antibody

b) Presence of HbsAG

c) Presence of HCV antibody

5) Susceptibility of exposed person

- Hepatitis B vaccine and response status
- HIV, HBV, and HCV immune status

6) The exposed health care worker will be offered pre-HIV test counselling based on informed consent, as well as ongoing counselling as desired. The confidentiality of the exposed health care worker will be maintained at all times.

a) If the HIV status of the source person is not known, the source

person will be informed of the incident and consent obtained to perform HIV testing as soon as possible, maintaining confidentiality of the source person at all times.

b) If the source person is negative for HIV, baseline testing or further follow-up of the exposed health care worker is not necessary.

c) If the source person refuses to be tested for HIV, the attending medical officer will contact the senior administrator for authorization to perform HIV testing. The authorization of the senior administrator will also be sought when the source person is confused or in a coma, or in the case of a minor if a parent or guardian is not available.

d) If the source person is not known, the exposure will be evaluated on the likelihood of high risk for infection: where and under what circumstances the exposure occurred.

7) If the risk of exposure is determined to be there, PEP against HIV should be started immediately, within 1–2 hours of exposure if possible; however, if a delay occurs, initiate PEP regardless of the interval. PEP should be continued for 28 days, and HIV testing should be repeated after 2 weeks, then thereafter at 6 weeks, 3

months, 6 months, and 1 year.

4. **Risk definition**

a. Low risk

- Exposure to a small volume of blood or fluid contaminated with blood from asymptomatic HIV-positive patients with low viral load
- Percutaneous exposure with a solid needle
- Any superficial injury or mucocutaneous exposure

b. High risk

- Exposure to a large volume of blood or potentially infectious fluids
- Exposure to blood or blood contaminated fluids from an HIV-infected patient with a high viral load
- Injury with a hollow needle
- Deep and extensive injuries
- Confirmed ARV drug resistance in the source patient

c. Regimen for Risk Category

ARV Prophylaxis

Low Retrovir (AZT) 300 mg twice a day X 28 days

Epivir (3TC) 150 mg twice a day X 28 days

(NOTE: Regimen may be dispensed as Combivir 1 tab twice a day.)

High Retrovir (AZT) 300 mg twice a day X 28 days

Epivir (3TC) 150 mg twice a day X 28 days

Indinavir 800 mg three times a day X 28 days

(NOTE: Combivir 1 tab twice a day may replace retrovir + epivir)

4.15 Handling and Disposal of Biohazard Waste

1. **Purpose**

The principal purpose of disposing biohazard wastes e.g. sharps, laboratory wastes, and microbiological specimens is to avoid contamination with infectious waste agents known to be infectious to humans.

2. **Equipment and Materials Required**

- Waste bins of yellow, red & green colour
- Bin liners for biohazard waste
- Disposable sharps containers
- Latex gloves

3. **Disposal of Biohazard Waste**

General Rules

1. Prior to any treatment, all biohazard wastes, including those to be incinerated, should be enclosed in a puncture-resistant, biohazard bag that is color-coded or labelled with the biological hazard symbol.
2. The person handling the emptying of waste bins, waste bottles or sharps

containers must be careful not to touch anything without protective clothing and must use gloves to avoid contracting infections from the waste.

3. The waste bins, sharps containers, etc., must be clearly indicated/marked:

Biohazard wastes.

A. Laboratory waste

- Discarded swabs, cotton, sample containers and other biohazard but non-sharp

  objects used for sample collection should be placed in yellow bags. Visibly soiled or splashed tourniquets should be discarded and new equipment used.
- Disposable plastics such as tips, test tubes, gloves, syringe used for testing of samples should be disposed of in a red bin.
- Pipettes should be soaked in special pipette baskets in 10 % household bleach overnight, before being thrown in a waste bin.

B. Sharps

- All sharp implements used in the laboratory need to be handled carefully.
- Broken glassware must also be handled as sharps. The laboratory should have a special box for broken glassware.
- If needles are used, they should never be recapped before disposal. All needles should be burnt in needle destroyer.

- Dispose of all sharps directly into a sharps disposal container. The sharps container should be puncture-resistant, leak proof on the sides and bottom, and color-coded or labeled with a biohazard symbol.

C. Residual body fluids

- Ensure that all tubes/containers containing residual body fluids are properly sealed to avoid spillage. These are then stored temporarily in waste bins.
- Transfer the disposal bags, together with contents, into autoclaving bags stick a piece of auto clavable tape on the bag and then autoclave as required.

D. Chemical wastes

The following procedure is adopted for most chemicals used in low concentrations.

- Collect all liquid chemical waste in properly labeled bottles with a little concentrated disinfectant.
- Keep monitoring the rising level of waste in the trap bottles. Never fill the trap bottles to the very top to avoid spillage.
- Empty the contents of the trap bottle down the drain, preferably a special sink in the laboratory, and wash down with more disinfectant, liquid soap and a large volume of water.

- Minimum disinfection time of any liquid Biohazard Waste is 30 minutes.

4. Safety Precautions

- Anybody handling Biohazard Wastes should always put on laboratory protective clothing and gloves and keep to the laboratory safety practices to avoid viral and other infectious disease transmissions.
- Any spills or splashes of infectious material should be immediately cleaned up with absorbent material using an approved disinfectant such as dilute 10% bleach or chlorhexidine solution.

5. POLICY AND PROCEDURE ON IMAGING SERVICES AND SAFETY PROGRAMME

1. Purpose

To provide guide lines for the operations of imaging services in the Malabar medical college hospital

2. Scope

All patients who receive services from imaging department.

3. Responsibility

- Radiologist,
- Radiation Safety Officer,
- Radiography Technicians

4. Abbreviations

NABH: National Accreditation Board for Hospitals and Healthcare Providers

AAC : Access, Assessment and Continuity of Care

5. REFERENCE

Pre Accreditation Entry Level standards for Hospitals-First Edition: April 2014

6. POLICY

a) Compliance with legal requirement:

- AERB / BARC approval for imaging unit has been obtained after inspection and the licenses are displayed in their respective areas to prove compliance on these issues.
- Ultrasound Machines are registered with District Medical Office and all PNDT rules being followed.
- All the workers of the imaging services have been provided with TLD badges for monitoring of their individual exposures to radiation as part of radiation safety program.
- Regular monitoring of these badges has been out sourced and a record for the same is maintained in the radiology department of SMCH.

- Proper sign posting has been done in the radiology department**.**
- Training of department staff.

b) Diagnostic Imaging includes the following:

- Computerized Radiography
- Mobile Radiography.
- Ultrasound and Colour Doppler.
- CT scan.
- MRI Scan

c) Identification of patient:

- MMC Hospital shall ensure that all the patients are identified prior to carrying out their investigations.
- All those patients who require assistance will be transported safely without causing any injury to them in the process.
- Where applicable patient shall be advised for pre-test preparation and appointment shall be scheduled for the test when pre-test preparation deserves time more than a day.
- The cases shall be taken up on first come first serve basis, unless otherwise there is requirement to give priority for specific patients for clinical or other valuable reasons.
- Technician shall orient the patient for taking shots based on to film/equipment

positions/process norms and diagnostic requirements on request of medical practitioner.

d) Safe Transportation of Patients:

The hospital shall ensure the safe transportation of patients to the imaging services. For patient's transportation the Inter – Hospital transfer procedure shall be followed. The medical staffs arranging transportation is responsible for this task. (It should be intra hospital transfer or just hospital transfer, inter hospital transfer means transfer to other hospitals)

e) Time Frame for all Results:

Imaging results shall be available within the defined time frame. Imaging results shall be made available on a prefixed schedule of timing. In case of critical patients, the results shall be intimated as immediate as possible.

f) Critical Result Intimation:

Critical results shall be intimated immediately to the concerned personnel. Imaging test not available in the organization shall be outsourced to the organization based on their quality assurance programme.

g) Results Reporting:

The report shall also include the results of any calculations and analysis of radioactive material deposited in the body of the employee. The report shall be in writing and shall contain the statement: "You should preserve this report for future reference."

h) Outsourced Tests:

Imaging test not available in the organization shall be outsourced to the organization based on their quality assurance programme

i) Qualified Staff for Department:

Adequately qualified and trained person shall only be deployed for imaging services. Only qualified, credentialed and authorized clinician shall be responsible for conducting or supervising all radiology procedures and reporting.

5.1 PROCEDURE: Radiology equipment:

The X-ray units in use in the hospital are fixed X-ray unit, portable X-ray units placed in the high dependency areas, C-arm X-ray unit used in the OT. They are used for diagnostic purposes only. Radiation protective jackets and gloves should be worn by the staff in the department during procedures. The imaging staff should at all times wear the radiation protection badges issued to them while inside the department and whenever radiation equipment are operated. These badges are to be stored safely away from the radiation areas while not in use. Radiation protection badges are to be sent to the radiation monitoring office periodically, results analyzed and remedial action, if any, required to be taken to ensure the safety of the staff and patients. Protection of bystanders while using X-rays, C-arm, etc., shall be ensured.

Protection of abdomen & vital structures of children / patients and staff shall be ensured.

5.2 Qualified personnel:

The radiology department is headed by qualified radiologists who will issue reports on all imaging services provided to the patients if so desired by the consultant.

The department shall have qualified and experienced radiographers who can conduct the procedures and develop the films for reporting.

5.3 Waiting Time for Procedures and Results:

The X ray films with or without the reports of the investigations shall be issued within the time limit specified for the procedure. The radiology department will ensure that all the results and emergency results are made available within a stipulated time frame. Critical findings when noticed are to be immediately intimated through the telephone to the treating doctor by the radiologist / technician.

In case any of the imaging equipment goes out of order, the patients requiring to undergo the procedure during such period are conveyed by the hospital ambulance accompanied by a staff nurse to other centre or Medical College Hospital, or Hospital imaging centre with whom the hospital has a working arrangement and after the procedure the patient is brought back with the test results

5.4 Reporting

X ray films and all reports of imaging test (except CT/ MRI) conducted will be dispatched on the same day within the time limit specified. Reports of all CT/MRI scans done for OP before 1 p.m. will be dispatched the same day by evening and

CT/MRI scans done after 1 p.m. will be dispatched the next day morning. Reports of CT/MRI scan done for IP will be dispatched to the respective wards the next day morning. However, all inpatients are given a verbal report immediately after completion of investigation. Critical findings when noticed are to be immediately to house surgeons or intimated through the telephone to the treating doctor by the radiologist. In some special cases (emergency hours or physician's request) the films are dispatched without reports. These are recorded in the Dispatch Register Patient recall for outpatients. In case of any examination which requires reference search or second opinion or any unavoidable delay, patients are kept informed for the reason for the delay and by what time the investigations/delivery of reports are likely to be completed.

If the Radiologist needs to repeat the scans or requires additional history of a patient to aid in reporting- the patient needs to be recalled. The front office staff will call the patient on the available contact number and recall the patient with proper explanation and communicate the same to Radiologist. In some special cases **(Emergency hours or Physician's Request)** the films are dispatched without reports. These are recorded in the Dispatch Register Patient recall for outpatients Any patient query regarding the reports will be dealt with immediately and clearly explained Patient Reports will be treated as confidential.

5.5 Maintenance of Equipment

Guideline Instructions: General

- All staff will clean the machine in their posted unit.
- Staff will conduct daily check on its working condition daily & do regular warm up. Shutdown of machine should be done after working hours.
- Night shift person is responsible for the machine till the handover to the next day morning shift person.
- Never keep any fluids over or near equipment's.
- Monitor Housekeeping staffs during cleaning mainly with wet mops.
- In daily briefing working condition & breakdowns of machine should be handed over without fail.

Breakdown Management

- During breakdowns shutdown and restart the unit, check all input & cables for loose connections.
- In case this fails, complaint should be logged into Equipment History Card and Work order should be raised and given to the Biomedical In charge mentioning the Machine Name, time of breakdown.
- The Biomedical engineer will inspect the machine & take necessary action as per their protocol. It is the duty of the Radiographer to inform the Head of the

Department of Radiology, Registration Counter, ED, ICCU and other patient care areas about the breakdown.

- In case of major break down the medical director should be informed. After rectification service report is received and filed & the same is entered in Instrument History Card.

Patient Education and Safety

- All patients are explained about the process of the diagnostic investigation in detail before starting the process.
- All Patients are explained when and how their reports can be collected.
- While undergoing the investigation, all necessary precautions related to patient safety is explained & followed.
- Special care is taken while undergoing Investigations of infants/neonatal and Geriatric patients. The parent /next of kin of such patients are kept informed of the process before investigations are started.
- Attention of the patients will be drawn to the hygiene and safety aspects before undergoing the Investigation.
- Consent will be taken whenever required in the appropriate forms.
- All necessary steps will be taken to reduce /minimize /eliminate discomfort /pain while conducting the Investigation.

5.6 Training of staff

Departmental Orientation programme for the new employees (Fresh recruit or transferred emphasizes on the following:

- General orientation to the radiology department
- Radiology department policy and procedure and work flow
- Overview to various equipment's operated by the department in detail
- Radiation safety & quality assurance practices
- Basic unit maintenance and trouble shooting
- Documentation and record keeping
- PNDT act & Maintenance of records is explained
- Uses of TLD badge & how to use Hand out given.
- Turn Around time for different types of cases (Normal, Urgent etc.)
- Various forms and reporting formats used by the department

5.7 Departmental inventory management

The responsibility for proper management of the departmental inventory rests with the radiographers. A stock book for the various items including the medicines used by the department is maintained. Physical verification of the stock is done every day by the radiographers. Replenishment of stock is done using the appropriate indent request form All medicines subject to expiry are returned to the pharmacy store and indent request for fresh stock is placed.

5.8 Outsourcing of Radiology Services

Outsourcing of Radiology services will be done in the following circumstances Services out of the scope of radiology department will be outsourced- Certain advanced MRI imaging like Cardiac MRI, MR mammogram and functional MRI. During equipment failure or when the equipment cannot be repaired within the stipulated time or delay in repair is interfering with emergency patient care.

5.9 Recall of Radiology Report

When a discrepancy of radiology report is noted by the radiologist or by the treating consultant the radiology report will be recalled & corrected. Original report from the

patient will be collected. Fresh & corrected report will be issued to the patient & the same should be informed to the treating/referring doctor.

5.10 Updation of imaging protocol

We have imaging protocols for radiology investigations, which are updated 6 monthly.

5.11 Radiation safety programme

As a part of radiation safety, safety boards (In bilingual & Pictorial) are attached over doors of X-Ray & CT scan.

1. **Personal Dose monitoring**

   TLD badge is provided to all staff dealing with radiation equipment's. Radiation dose measurement is done every 3 months & the doses are checked by the RSO & a file is maintained.

2. **Lead Apron Calibration**

   Lead apron calibration is done at 6 months' interval to identify its efficiency & to look for any damages. The details of the calibration are recorded by using CT Scan images & a file is maintained & verified by RSO.

5.12 ANNEXURE A: **Turn Around Time for USG Scanning Results (Ultrasound Scan)**

Sl. No	PROCEDURE		TAT
1	USG ABDOMEN AND PELVIS		30-45 Mins.
2	OBSTETRICS		30-45 Mins.
3	TRANS VAGINAL SCAN		30-45 Mins.
4	FOLICULAR STUDY		15-30 Mins.
5	SCROTUM		30-45 Mins.
6	THYROID		30-45 Mins.
7	BREAST		30-45 Mins.
8	SMALL PARTS		30-45 Mins.
9	COLOUR DOPPLER STUDY	ARTERIAL DROPPLER	30-45 Mins.
		PERIPHERIAL VASCULAR ARTERIERS	30-45 Mins.
		VENOUS DOPPLER	30-45 Mins.

5.13 X-RAYS:

TURN AROUND TIME (TAT) FOR X-RAY FILMS

All types of special investigation X-rays like IVP, HSG, AUG and Barium studies reports will be issued with films within the specified TAT.

Sl.No	PROCEDURE	No. Of Views	TAT
1	SKULLAP/LATERAL	02	15 Mins.
2	MANDIBILE AP	01	10 Mins.
3	BOTH MASTOID LATERAL	02	15 Mins.
4	ORBIT PA	01	10 Mins.
5	PARANASAL SINUS	01	10 Mins.
6	T M JOINT LATERAL	02	15 Mins.
7	CERVICAL SPINE AP/ LATERAL/ OBLIQUE	03	20 Mins.
8	CERVICAL SPINE. FLEXTION/ EXTENSION/OPEN MOUTH/ RAO/ LAO	05	30 Mins.
9	SHOULDER AP/ AXIAL	02	15 Mins.
10	CLAVICAL AP	01	10 Mins.
11	CHEST PA/LATERAL/ RAO/ LAO	04	30 Mins.
12	THORACIC SPINE AP/ LATERAL	02	20 Mins.
13	D L SPINE AP/LATERAL, OBLIQUE	03	25 Mins.

14	LUMBER SPINE AP/ LATERAL / OBLIQUE	03	30 Mins.
15	LUMBER SPINE FLEXTION/ EXTENSION/ RAO/ LAO	04	30 Mins.
16	HUMEROUS AP/ LATERAL	02	15 Mins.
17	ELBOW AP/ LATERAL	02	15 Mins.
18	FOREARM / AP / LATERAL	02	15 Mins.
19	WRIST / AP / LATERAL	02	15 Mins.
20	HAND / AP / LATERAL / OBLIQUE	03	20 Mins.
21	PELVIS / AP / LATERAL	02	15 Mins.
22	BOTH HIP / AP / LATERAL	04	25 Mins.
23	SACRUM / COCCYX / AP / LATERAL	02	20 Mins.
24	WHOLE SPINE / AP / LATERAL	02	15 Mins.
25	KUB	01	10 Mins.
26	BED SIDE X-RAY	01	35 Mins.
27	ABDOMEN ERRECT	01	10 Mins.
28	FUMER / AP / LATERAL	02	15 Mins.
29	KNEE / AP / LATERAL / AXIAL	03	20 Mins.
30	LEG / AP / LATERAL	02	15 Mins.

31	ANKLE / AP / LATERAL	02	15 Mins.
32	FOOT / AP / LATERAL / OBLIQUE	03	20 Mins.
33	CALCANEUS / LATERAL / AXIAL	02	15 Mins.
34	RGU/ AUG	04	1 HR.
35	IVP	06	2 HR.
36	BARIUM SWALLOW	04	1 HR.
37	BARIUM MEAL	04	1 HR.
38	BARIUM MEAL FOLLOW THROUGH	06	1 HR.
39	BARIUM ENEMA	03	1 HR.
40	HSG	03	1 HR.

C

Plain and contrast CT of Brain, Orbit, PNS, CT of spine [Cervical, Thoracic & Lumbo Sacral] CT of Abdomen, Thorax (Chest), Pelvis. CT of Extremities.

TURN AROUND TIME FOR RECEIVING CT INVESTIGATION RESULTS

C T

TURN AROUND TIME FOR RECEIVING C T INVESTIGATION RESULTS

Sl.No	PROCEDURE		TAT
1	BRAIN	PLAIN	2 HR
		CONTRAST STUDY	2 HR
2	BRAIN WITH FACIAL BONE		3 HR
3	BRAIN WITH CERVICLE SPINE		3 HR
4	NECK	PLAIN	2 HR
		CONTRAST STUDY	4 HR
5	PARANASAL SINUSES		2 HR
6	TEMPEROAL BONE		4 HR
7	CHEST	PLAIN	3 HR
		CONTRAST STUDY	4 HR

8	HRCT LUNGS		4 HR
9	SHOULDER		3 HR
10	WHOLE ABDOMEN	PLAIN	3 HR
		IV CONTRAST STUDY	4 HR
		ORAL + IV CONTRAST STUDY	4 HR
		ORAL + IV + RECTAL CONTRAST STUDY	4 HR
11	UPPER ABDOMEN	PLAIN	3 HR
		CONTRAST STUDY	4 HR
12	PELVIS	PLAIN	3 HR
		CONTRAST STUDY	4 HR
13	CT UROGRAM	CONTRAST STUDY	4 HR
14	ELBOW		3 HR

15	KNEE		3 HR
16	ANKLE		3 HR
17	OTHERS		4 HR
18	CT KUB		3 HR
19	C S SPINE		3 HR
20	LUMBER SPINE		3 HR
21	3D	FACE	3 HR
		PELVIS	
		SKULL	
		OTHERS	

CONTROLLED DOCUMENT

MRI STUDY TURN AROUND TIME

1	MRI ROUTINE STUDY	4 HR
2.	MRI CONTRAST	4 HR
3	BRAIN SCREENING	3 HR
4	SPINE SCREENING (WHOLE)	3 HR
5	BRAIN CONTRAST	4 HR
6	SPINE CONTRAST	4 HR
7	PROSTATE	4 HR
8	PROSTATE CONTRAST	4 HR
9	MRS PROSTATE	4 HR
10	FISTULOGRAM	3 HR
11	MRCP	4 HR
12	MR PELVIS WITH APD SCREENING	4 HR
13	MR PELVIS	4 HR
14	MR PITUITARY WITH CONTRAST	4 HR
15	STROKE PROTOCOL AND SCREENING	30 Mins

6. POLICY AND PROCEDURE ON DISCHARGE

1. Purpose

To give proper discharge summary which given to the patients who discharged from Malabar Medical College and also to the patients who leaving against medical advice.

2. Policy

- When the patient becomes better and ready for discharge, the decision taken by the primary consultant. If the patient wants to discharge by his/her own decision not advised by doctor, it should be discharged against medical advice.
- Every patient discharged from the hospital including DAMA cases, should be given the discharge summary containing all the required data to enable continuity of care, this also includes discharge note by the emergency department in case of Refusal of Admission in ER
- The Discharge summary to be prepare by the consultant or by the junior resident, if J R prepared the consultant will cross check.
- MLC discharges are to be informed to Police.
- Deceased body shall be handed over only to the police in case of MLC.
- All the necessary formalities as determined in handling of MLC case discharge shall be carried out.

3. Process

- The treating consultant shall decide on the patients to be discharged during the day

in his/ her daily rounds. She/he shall inform the Sister in charge or Ward nurse accordingly and update the discharge instructions in the physician's notes in patient file (case sheet).

- Discharge of patient once initiated by consultant, the same is communicated to the patient, relatives, and the concerned ward nursing staff / on duty Medical Officer, billing staff and back office.
- All the investigations, bed charges, consultation charges, surgery charges (if performed), medications, procedures (if any), implants if used, consumables used and any other expenses incurred on the patient during his/her stay in the hospital is entered into the HIS by the sister in-charge of the patient.
- Nurse in charge or nursing supervisor to review all the activity charts for discharge and shall discuss with the concerned sister and verify the HIS/IP billing chart to ensure that all the procedures/investigations done for each patient are updated for billing purposes.
- Sister in charge shall raise online return note in HIS for medication not used for patient and send medicines to be returned to IP Pharmacy through housekeeping personnel.
- Pharmacist shall update details on the system & raises discharge intimation online in HIS and send the activity chart to the billing department.
- Final bill would be prepared after checking all the billing clearances from various

departments and the concessions applicable (if any).

- Bill audited and 2 copies made – patient copy(original) and accounts copy(duplicate) for Accounts Department in case of cash patients. 3 copies are generated in mediclaim cases-one for TPA (original), one for patient (duplicate) and one for the account dept (duplicate)
- Patient/ relative is informed regarding the bill
- On clearance of bill either by cash or by insurance, original copy of the bill in case of cash patients and copy of the bill in case of credit patients is handed over to the patient or attender along with two copies of Discharge Slip/clearance slip. One of which is to be handed over to the nurse on floor and another to the Security Personnel posted on the floor.

3.1 Discharges Against Medical Advice (DAMA)

- In case if patient/relatives seek discharge against medical advice; the same is indicated in the patients case record by the Primary Treating Consultant/Medical Officer.
- Patient/ relatives are informed about the patient's condition and the consequences that may follow after discharge
- Even after that if the patient/relative are keen on taking discharge a written consent and D.A.M.A form is filled and signed by the patient/ relative stating that they have been explained about the patient's condition and the consequences that may follow

and that the hospital shall not be held responsible for any consequences related to the patient's conditions due to early discharge.

- A copy of DAMA forms is filed in to the patients IP File.
- Discharge Summary is prepared and the above mentioned steps are followed, all investigation reports are to be provided to the patient even if they are leaving against medical advice.

3.2 Medico legal cases

- Medico legal forms are to be filled and intimation to the police is sent by EMO(Emergency Medical Officer)/Nurse
- All investigation reports and evidential materials shall be preserved; Staff nurse on duty will be responsible for collecting the reports
- MLC on admission, discharge to home, transfer to another hospital or death will be documented and the police will be intimated.
- At the time of discharge all investigation reports should be given to the patient and only the radiological investigation films has to be maintained in MRD.
- If the patient/ attender insist on having the radiological investigation films then consent for the same is taken by MRD staff and shall be handed over to them.

4. The Discharge Summary shall contain:

- Name, age, sex, ID no
- The reason for admission
- Significant findings diagnosis
- Procedures (if performed)
- Treatment given
- Condition at the time of discharge
- Discharge medications and follow-up instructions
- When and how to obtain urgent care
- In case of death, the discharge summary includes the cause of death
- All the patients are provided with a discharge summary at the time of discharge.
- When the discharge summary ready and formalities of discharge once completed, the nurse will explain the summary to the patient/relative.
- Patients requesting discharge against medical advice shall be explained the risks and consequences, the consent will be obtained from the patient/ family as per the consent policy.

5. Reference

Pre Accreditation Entry Level standards for Hospitals-First Edition: April 2014