



**KINGDOM OF SAUDI
ARABIA INAYA MEDICAL
COLLEGE**

DEPARTMENT OF NUCLEAR
MEDICINE TECHNOLOGY

INTERNSHIP LOG BOOK

INTRODUCTION TO CLINICAL PRACTICE

Clinical Practice Courses form an integral part of Academic Curriculum and Student's Study Plan. Clinical Practice provides students with the opportunity to increase their knowledge and experience by participating in the care of patients in various clinical facilities. Students can apply their professional, academic knowledge to real clinical situations, perform their acquired skills of assessment and intervention, and affirm their professional behavior. Assigned clinical tutor supervises the students with the assistance of the preceptors. In addition, arrangements are negotiated with individual clinical establishments, private and government, hospitals and clinics. Students start clinical training from level six and continue until the end of the program covering a total of clinical course.

PLACEMENT SELECTION:

The Clinical Coordinator is responsible for arranging the clinical placements, in coordination with the Chair. Students may indicate their preference but cannot be assured that it will be met. The number of students placed in each clinical facility is negotiated individually by the Clinical Instructor.

ATTENDANCE:

Clinical Practice is mandatory. Students are expected to attend all clinical practice components of the Programmed. Students are not permitted to alter the dates of their Clinical Practice on their own. Only under special circumstances and after discussion with the Clinical Coordinator before the start of a Clinical Practice, may a student alter the dates of the placement, and then only if the clinical facility is capable of accommodating the change.

Students are expected to be punctual (to arrive on time) at the clinical facility and to leave at the designated time for the respective Clinical Practice session. Students may be asked by the Clinical Coordinator to make-up missing hours.

CODE OF ETHICS:

Students are expected to familiarize themselves with and apply the Medical Ethics. Confidentiality and privacy of patients are essential features, along with the many other many ethical aspects of the profession that students must adhere to.

DRESS CODE (IN & OUT OF UNIVERSITY & CLINICAL FACILITY):

Undergraduate students are expected to demonstrate professionalism through appropriate attire and behavior. The College uniform consists of wearing a lab coat, buttoned, with the ID name tag (the student ID card placed in the envelope & clip provided by the College. Students must wear the proper attire and ID at all times.

In addition, the students must observe the dress code of the clinical facilities in which they are placed. When in doubt, students should clarify dress and behavior codes with the preceptor or Clinical Coordinator. Students who do not comply with the above may be withdrawn from the Clinical Practice by the Clinical Coordinator or asked to leave by the clinical facility. Students will receive an academic warning from the Chair.

LEARNING RESOURCES:

During Clinical Practice, students are expected to access the college library, Hospital library (if available), as well as the Internet through college or hospital computers in order to pursue the evidence-based practice.

COMMUNICATION SKILLS:

Students are expected to communicate verbally and non-verbally in a professional manner and to stay away from confrontational situations with the:

- Patients.
- Family members.

- Preceptor.
- All hospital staff.
- Clinical Coordinator.

RESPONSIBILITIES:

1- STUDENT:

The student participates actively in the Clinical Practice course as a learner. The student acquires further knowledge & skills through the clinical experience. To do so, the student should:

- Have a working knowledge of the policies and procedures and guidelines of the Programmed as related to Clinical Practice.
- The student **MUST** be Wears the (TLDs) or (OSLs) during clinical practice.
- Utilize academic information to maximize clinical learning.
- Identify own areas of deficit in patient care to the preceptor in order to preserve the quality of care.
- Adhere to the clinical facility policies and procedures.
- Adhere to make the clinical report for each clinical practice.
- Communicate any concern regarding the placement to the preceptor and Clinical coordinator/ faculty member.
- Complete all the evaluation forms of Clinical Practice completely and on time.

2- PRECEPTOR:

The preceptor is the clinician responsible for the day-to-day supervision and evaluation of the students. The preceptor shall:

- Provide orientation to the clinical facility and of the area where the students will be working.

- Identify and provide appropriate patients to meet clinical objectives.
- Design appropriate learning situations to maximize the student's learning.
- Supervise student's daily practice through direct observation, discussion and written work as appropriate.
- Provide students with ongoing constructive and specific feedback that encourage and support the student's learning.
- Presently written an evaluation of the student's performance at mid-term and at the end of the clinical practice period.
- Communicate with the Clinical Coordinator regularly and offer feedback, student's preparedness, ability to identify learning needs and overall performance.
- Provide feedback to the clinical Coordinator on the perceived needs of the students, providing input in the development and revision of the curriculum.
- Attend Clinical Practice meetings and workshops as necessary.

3- CLINICAL COORDINATOR

The Clinical Coordinator is a faculty member who is responsible for coordinating the students' placements for the Clinical Practice component of the Programmed in collaboration with the Chair of the Programmed. The Clinical Coordinator ensures that the educational philosophy and goals of the Programmed are met.

Generally, he will:

- Develop the external, educational clinical practice component of the curriculum.
- Ensure the quality of the students' learning experiences (content).
- Manage and monitor the logistics and clinical resources of/for Clinical Practice.

- Evaluate the students' clinical performance and provide a documented assessment.
- Share information with students, preceptors, clinical supervisors and academic faculty about Clinical Practice.
- Communicate with relevant clinical institutions in KSA.

Specifically:

- Orient clinical preceptors to the Policies and Procedures of Clinical Practice as well as to the objectives of each Clinical Practice course.
- Ensure that preceptors have a copy of all necessary information and forms.
- Assist preceptors in the supervision of students in the clinical facilities.
- Respond to concerns of students and preceptors and facilitate acceptable solutions.
- Assist preceptors in student's evaluation and assign final grades.
- Facilitate the preceptors in the development of their roles, i.e. reference material or in-service education.
- Provide constructive feedback to preceptors.

OBJECTIVES:

General Objectives:

During the internship period, the student shall seek to attain the following Knowledge:

- a. Applies theoretical knowledge to the practice area.
- b. Possesses appropriate information for useful practice.
- c. Applies the scientific method to professional practice.

- d. Self-evaluates learning needs and performance.
- e. Discusses standards of health care delivery services.

Skills:

- a. Attends the minimum of required hours of each clinical practice.
- b. Seeks clinical information (e.g., ask relevant questions, refer to professional literature, etc.).
- c. Demonstrates appropriate clinical abilities and adapt appropriately to varied clinical situations.
- d. Practices in a safe manner that minimizes risk to a patient, self and others.
- e. Documents accurately professional clinical information.

Professional Behavior:

- a. Is responsible for one's own clinical learning.
- b. Adheres to ethical and legal standards of practice.
- c. Demonstrates respect and sensitivity towards individuals.
- d. Communicates professionally with patients, preceptors and other professionals.
- e. Acts as an active member of the clinical team.

Specific Objectives:

The specific objective is related to the internship training specifications found in the appendix of this log book.

- a. To adhere to ethical and legal practice.
- b. To communicate in ways congruent with situational needs.

- c. To adapt the delivery of care to reflect respect for and sensitivity to individual differences.
- d. To document the radiographic examination for each patient.
- e. To participate as a health care team member.
- f. To adhere to clinical facility rules & regulations.
- g. To identify learning needs and communicate them to preceptor and faculty as necessary.

ORIENTATION

A proper orientation can set the tone for the students in Clinical Practice; students are often apprehensive and nervous when starting their clinical placements. It is similar to what one might expect when starting a new job. The student does not need to know everything that the clinical professional needs to know. It is important to separate the “need to know” from the “nice to know”. The orientation varies from clinical facility to a clinical facility. The suggested procedures are meant as guidelines to assist in identifying what may be important to highlight in a clinical facility.

Appendix:

Clinical Practice Competency Evaluation (CPCE):

- All evaluation has to be handed to the course instructor one week before the end of the training period.

Case Study report & presentation:

- The Selected case should be approved by the course instructor.

Attendance:

- Sign the attendance register when you start and finish your duty for the day.
- Be punctual.
- If you are sick or absent for any reason, you must contact the supervisor. You must also inform the radiology manager/head of the department of your hospital. Calls must be made first thing in the morning. If you are sick for more than one day you must call each day.
- Unjustified absences are dealt with as per hospital rules.

Attitude and behavior in the department:

- Listen to instructions / be observant.
- Use your initiative.
- Work to the best of your ability.
- Do not be afraid to ask questions and accept criticism well.
- If you make a mistake do not be afraid to admit it- everyone makes mistakes in the initial learning stage.
- Be patient, tolerant and polite to patients and other staff.

INAYA MEDICAL COLLEGE
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INTERNSHIP TRAINING SCHEDULE

	SECTION/AREA OF TRAINING	DURATION	DATE OF TRAINING	COMMENTS
1	Instrumentation and radiation safety	4 weeks		
2	Endocrinology in nuclear medicine	4 weeks		
3	Oncology in nuclear medicine	4 weeks		
4	Respiratory system in nuclear medicine	4 weeks		
5	Gastrointestinal system in nuclear medicine	4 weeks		
6	Urinary system in nuclear medicine	4 weeks		
7	Neurology in nuclear medicine	4 weeks		
8	Musculoskeletal system in nuclear medicine	4 weeks		
9	Miscellaneous imaging system in nuclear medicine	4 weeks		
9	CT imaging system	4 weeks		
10	MRI imaging system	4 weeks		
11	Hybrid imaging in nuclear medicine	5 weeks		
12	In vitro techniques in nuclear medicine	3 weeks		
	TOTAL:	52 weeks		

Tutoring Log

Why use a clinical log book?

The clinical part of the medical course is less structured and calls for more self-direction and initiative than earlier parts. This means that you must take responsibility for directing your own learning in the hospital and general practice environment. This clinical log book is intended to help you with this and we hope you will find it useful. It will:

- show you what you should be observing, doing and practicing when you are in the wards, clinics, theatres and in general practice;
- help identify any gaps in your learning and guide you in remedying them;
- prepare you for the Objective Structured Clinical Examination, at which you will be assessed on your performance of the skills described in this book.
- we have given some suggestions about time points for learning. These are for guidance only but we hope that it will help you plan and monitor your learning.

Radiation Safety Procedures in nuclear medicine department

- Wear laboratory coats in areas where radioactive materials are present.
- Wear disposable gloves when handling radioactive materials.
- Monitor hands and body for radioactive contamination before leaving the area.
- Use syringe and vial shields as necessary.
- Do not eat, drink, smoke, apply cosmetics, or store food in areas where radioactive material is stored or used.
- Wear personnel monitoring devices in areas with radioactive materials.
- Never pipette by mouth. Dispose of radioactive waste in designated, labeled, and properly shielded receptacles located in a secured area.
- Label containers, vials, and syringes containing radioactive materials.
- When not in use, place in shielded containers or behind lead shielding in a secured area.
- Store all sealed sources (floods, dose calibrator sources) in shielded containers in a secured area.
- Before administering doses to patients, determine and record activity. Know what steps to take and the person to contact (radiation safety officer) in the event of a radiation accident, improper operation of radiation safety equipment, or theft or loss of licensed material.



RADIOPHARMACY

GENERATOR

Date	Time	Activity/mci	Volume

Note:.....
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GENERATOR

Date	Time	Activity/mci	Volume

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KIT PREPARATION

Kit Preparation	T c m-pertecnetate mci/ml	VOLUME	Pt. dose	Concentration

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Quality Control Task List

Instrument	Procedures	Frequency	Note
Dose Calibrator	Accuracy		
	Constancy		
	Geometry		
	Other		
Survey Meter	Battery Check		
	Background		
	Calibrate		
	Check source		
	Other		
Camera	Extrinsic flood		
	Other		

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EXAMINATION TASK LIST

Patient information (Gender, Age, History)	Indication/PT Request	Radio-Ph.	Examination Type+ computer setup

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