

Guideline for Undergraduate Medical Internship Program in Bhutan



KINGDOM OF BHUTAN

**Bhutan Medical and Health Council
Ministry of Health
Royal Government of Bhutan**





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ROYAL GOVERNMENT OF BHUTAN
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MINISTER

PREFACE

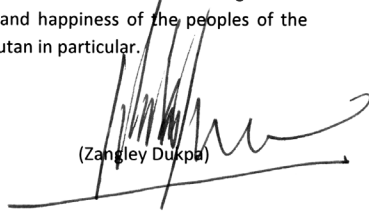
Internship programme is the most important component of the undergraduate medical course (MBBS or equivalent). Through this comprehensively structured internship programme, a medical undergraduate learns to apply theoretical knowledge into practical clinical skills under the supervision of experienced clinicians so as to enhance his/her skills on patient care.

This guideline is aimed at equipping the interns with clinical skills and knowledge that are essential during the course of their practice and will expose them to disease epidemiology, patients' management protocols and health system in Bhutan. The guideline requires all interns to maintain log books, which record all clinical procedures and skills they acquire or perform in each of the departments they are attached to.

The scope of this guideline extends to all Bhutanese medical students graduating from institutions within and outside Bhutan as well as foreign medical students who wish to undergo their internship programme in Bhutan.

The guideline is also equally useful for the supervising clinicians to gauge the level of professional competence of interns to work as doctors.

Since this guideline is geared to provide quality practical training, I urge all clinicians and intern to use it religiously and rigorously during the course of the medical undergraduate internship programme in the interest of the health and happiness of the peoples of the world in general and the people of the Kingdom of Bhutan in particular.



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Guideline for Undergraduate Medical Internship Program in Bhutan

Background

As a mandated by the Medical and Health Act (Chapter III, section 3) the Bhutan Medical and Health Council hereby formulates this guideline to set out procedures and requirements for Internship Program in Medical Education in Bhutan.

Introduction

Internship is the phase of compulsory undergraduate medical training leading to award of bachelor's degree and/or medical licensing registration.

Internship is undertaken to improve professional knowledge and acquire practical skills under supervision and guidance of a qualified supervisor in area of medical and health care to enable the graduate to function independently.

Purpose

This guideline is developed to facilitate Internship Program for;

- a. Medical students graduating from institutions within Bhutan.
- b. Bhutanese medical students graduating from Institutions outside the country
- c. Foreign medical students who wish to do internship in Bhutan¹

Scope

This Internship program helps the young doctor develop clinical competence, skills, evidence based clinical decision making process and finally into making of a rational human doctor.

¹Note: Foreign medical students completing internship in Bhutan do not guarantee them to work or get employment in Bhutan

Objectives

At the end of the internship program, the graduate shall be able to:

- a. Take proper history, perform clinical examination and initiate immediate management and advise appropriate investigations
- b. Diagnose and manage common disease conditions and make timely decision for referral to higher level
- c. Practice the rational use of essential drugs, infusions, blood or its substitutes
- d. To interpret basic laboratory and other investigation reports and take suitable decision on management
- e. Diagnose and initiate immediate management for all types of emergencies and timely referral to appropriate specialty.
- f. Develop skills in basic medical and surgical procedures.
- g. Acquire skill in proper documentation of the health events of the patients.
- h. Learn to take precautions to protect oneself and others during patient care.
- i. Learn to communicate effectively with the patients and their relatives.
- j. Inculcate due professionalism by developing self discipline, sympathetic approach towards patients and their relatives.
- k. Imbue professional sensitivity to socio-cultural norms and practices of the patients and their relatives
- l. Understand the use of National Guidelines and protocols.

- m. Understand the concept of primary health care approach for health promotion, disease prevention and rehabilitation.
- n. To practice evidence based medicine
- o. To learn basic clinical health research

Duration

Duration of internship shall be one year full time. Duration of daily working hours will be decided by the institutes.

The internship program shall be on rotation basis in different departments as shown in the table below:

Department	Duration
1. General medicine	8 weeks
2. Paediatrics	6 weeks
3. Psychiatry	2 weeks
4. Dermatology	1 week
Surgery	
1. General Surgery	6 weeks
2. Ophthalmology	2 weeks
3. ENT	2 weeks
4. Orthopaedics	4 weeks
5. Anaesthesia	1 week
Obstetrics and Gynaecology	
1. Obstetrics	6 weeks
2. Gynaecology	4 weeks
Emergency and Casualty Dept	4 weeks
Forensic Medicine	1 week
Radio-diagnosis	1 week
Community medicine	3 weeks
Transfusion medicine/Laboratory Medicine	1 week

General Rules for internship training in Bhutan

- a. Internship training shall be conducted only in hospitals/ institutes/or any other health centres authorised by the council as teaching institute.
- b. Every Intern shall complete the rotational posting in all departments mentioned above;
- c. The concerned university/Institute shall award the degree only after completion of the internship;
- d. A provisional registration shall be issued by the council to enable an intern to do the internship;
- e. If the candidate fails to complete the internship training during the stipulated time of one year, further extension may be granted by the council after proper justification from the head of the institute;
- f. The intern shall work directly under a supervisor identified by the institute;
- g. Intern shall not be allowed to issue any medical/medico-legal certificate;
- h. The Intern shall maintain a log book for all performed in each department;
- i. Time table for rotational posting shall be developed by the institute;
- j. Granting of leave is at the discretion of the Institute, but period of leave granted has to be adjusted by additional posting to fulfil the required duration of posting in respective department;
- k. A coordinator for internship program shall be appointed by JDWNRH till University of Medical Sciences starts

- l. During the training period the Intern shall be directly responsible to the Head of department/supervisor;
- m. The intern shall maintain professional confidentiality of the patients and the Institute;
- n. The Intern shall maintain standard code of ethics, etiquette and professionalism while dealing with patients and co-workers;
- o. The intern shall, at all times, be in proper attire and maintain a acceptable level of personal hygiene, behaviour and conduct;
- p. Internship completion certificate shall be issued by the head of the hospital;
- q. Intern shall be allowed to write prescription on the advice of the supervisor, but intern shall mention the name of the supervisor in the prescription;
- r. Intern shall write his name and council registration number clearly in the prescription;
- s. Unless authorised otherwise, the intern **shall not**:
 - i. Prescribe controlled drugs and high end antibiotics;
 - ii. Interfere with the line of patient management;
 - iii. Independently carryout invasive procedures;
 - iv. Interact with the media on issues concerning the hospital/institutions or patient care;
- t. The interns shall have the option of reporting any conflict of interests concerning the supervisors/department to the Head of the Hospital/institute;

Conditions for doing internship by Bhutanese/ Foreign candidates coming from outside the country:

- a. Institute where the candidate has passed shall have been recognized by the Bhutan Medical and Health Council;
- b. Internship training shall be conducted only in hospitals/ institutes/or any other health centres authorised by the council;
- c. The candidate shall produce offer letter from the hospital/ institute where the candidate is opting for internship at the time of applying for temporary registration;
- d. The host Institute of the candidate must have issued an undertaking to the effect that the candidate's internship program in Bhutan shall not hamper conferment of the degree to the candidate;
- e. Application with reason for doing internship in Bhutan shall be submitted within one month of passing the final examinations;
- f. The candidate shall submit an affidavit stating to complete the internship program;

Assessment

The intern shall be guided by the supervisor in each department and final assessment shall be done at the completion on the training on the core competencies:

- a. **Knowledge:** Knowledge on clinical management of patients in terms of history taking, clinical examination, appropriate investigations, treatment options, recent advances, preventive and promotive aspects, and their limitations;
- b. **Aptitude:** Professionalism, empathy, compassion

- c. **Behaviour:** Behaviour with patients, colleagues, nursing staff, and other health workers, team work:
- d. **Communication:** Communicate with the patients and relatives
- e. **Professional Skills:** Competency on performing medical and surgical procedures.
- f. **Punctuality/ Responsibility:** Coming on time, follow up of cases.

Assessment shall be done with the score of 1-5 as given in the table below:

Score	Grade
1	Unsatisfactory
2	Satisfactory
3	Good
4	Very Good
5	Excellent

Any intern who scores a total of only 12 points or less in each department shall not be eligible for registration with the council.

Core Competency	Score	Remarks
Knowledge		
Aptitude		
Behaviour		
Communication		
Professional Skills		
Punctuality/responsibility		
Total		

Expected outcome of the Internship:

General:

- a. Acquire the competency on history taking, physical examination, diagnosis and institute appropriate line of management of common diseases;
- b. Acquire competency to advise appropriate laboratory and other diagnostic investigations, and interpret them accordingly;
- c. Acquire competency to resuscitate seriously ill patients;
- d. Assist in management of cases in the intensive care unit;
- e. Develop competency on proper advice and follow up of all patients;
- f. Familiarize with the life saving equipments and procedures;
- g. Familiarize with interpretation of monitoring devices;
- h. Acquire competency in performing minor procedures;
- i. Know to find clinical evidence based on research
- j. Acquire competency on IV access, Urinary Catheterization, insertion of Ryles tube, administration of oxygen, inserting airway tube;
- k. Participate actively in discussion for general patient care;
- l. Acquire competency in preparing patients for diagnostic interventions such as GI endoscopy, colonoscopy, interventional and diagnostic radiological procedures (IVU, Barium swallow, barium enema, Hystero-salpingography), contrast enhanced imaging (CT/MRI) and ultrasonography;
- m. Familiarise with procedure in obtaining informed consents;
- n. Acquire competency in basic cardiac life support (BCLS);

- o. Familiarize with emergency resuscitations in line with advanced cardiac life support (ACLS) and advanced trauma life support (ATLS) protocols;
- p. An intern shall be allotted at least 5 indoor beds and 8 outpatient cases in major departments for work up and follow up and case presentation.

In addition to the above general expected outcomes, the intern shall be required to achieve the learning outcomes specific to the departments, as follows:

General Medicine

- i. Acquire competency on Pleural and Ascitic tap, Lumbar Puncture, Urethral catheterization, femoral vein access, nasogastric tube insertion, ambu bag placement and oxygen therapy.
- ii. Develop competency on history taking, diagnosis, investigation and management of common medical problems;
- iii. Assist and familiarise with bone marrow aspiration, Pericardiocentesis, SCV access catheterization and IJV access catheterisation;
- iv. Acquire competency in interpretation of basic Electrocardiographs (ECG);
- v. Understand the indication for transfusion of Blood and its products, and fluid replacement;
- vi. Follow up of cases in the intensive care units
- vii. Case presentation in the ward and outpatient department.

General Surgery

- a. Institute first-line management of surgical emergencies;
- b. Develop competency in proper history taking, diagnosis, investigation of common surgical diseases;
- c. The intern develop competency on Central line insertion, Incision and drainage of abscess, urinary catheterisation, excision of superficial lumps, suprapubic cystostomy, chest tube insertion, digital rectal examination and proctoscopy;
- d. Gain knowledge on haemorrhoid banding, observe venesection procedures, and major surgical procedures and upper and lower GI procedures.
- e. Case presentation on common surgical cases
- f. Counsel pre and post-operative surgical patients regarding procedures, process, outcome and follow up;
- g. Observe and assist in the operation theatre, write operation notes and follow up post operative cases;
- h. Follow up of cases in the intensive care units

Obstetrics and Gynaecology

- a. Acquire competency in: conducting Normal and Assisted deliveries, performing Dilation and curettage, Partograph use, Active management of third stage of labour, Immediate neonatal resuscitation, Amniotomy, Repair of perineal tears and Evacuation and Curettage;
- b. Develop competency in proper history talking, diagnosis, investigation and management of common gynaecological and obstetric diseases;
- c. If cases are present the Intern shall also observe and assist MRP and PPH management;

- d. The intern shall observe and assist in Obstetric and gynaecological surgeries like Caesarean section, TAH, VH, Laparoscopy, Hysteroscopy and do follow up of post operative patients in the ward and ICUs.
- e. Do case presentation in ward and OPD Obs and Gyne cases;
- f. Acquire competency in pelvic assessment; Speculum and bimanual examination in gyene and Obstetric patients
- g. Learn basic gynae-obs ultrasound;
- h. Understand the basis of rational prescribing in pregnancy and lactation.
- i. Familiarise with gynaecological cancer screening and prevention;

Paediatrics

- a. Acquire competency on following paediatric procedures: neonatal resuscitation, new born exam, exchange transfusion, Nebulisation; IV insertion, heel stick puncture, OG and UVC insertion, Lumbar puncture, Intubation, PPV, NG insertion, Urethral catheterization, plural tap ascetic tap, and bone marrow aspiration.
- b. Acquire competency on Screening of newborn babies for congenital abnormalities;
- c. Assess nutritional and dietary status of infants and children and recognise growth and psychomotor development abnormalities in paediatric age group;
- d. Develop competency in proper history taking, diagnosis, investigation and management of common paediatric and neonatal problems;

- e. Develop competency in Paediatrics medicine dosage and oral rehydration therapy;
- f. Familiarise with national guideline on Integrated Management of Neonatal and Childhood Illnesses (IMNCI) and nutrition management.
- g. Observe and assist in the management of patients in the Paediatric and neonatal ICU;

Orthopaedics

- a. Initiate first-line of management for orthopaedic emergencies and make appropriate referrals;
- b. Develop competency in proper history taking, diagnosis, investigation and management of common orthopaedic problems;
- c. Acquire competency on:
 - i. Irrigation and debridement of simple lacerations and open fracture wounds
 - ii. Closed reduction of simple fractures and common dislocations
 - iii. Skin traction and Skeletal traction techniques,
 - iv. Plaster application and splinting technique
 - v. Joint aspirations and casting of upper and lower limb injuries
 - vi. Incision and drainage of abscesses and excision of toe nails;
- d. Shall assist in orthopaedic surgical procedures and do post operative follow up of orthopaedic patients;
- e. Counsel pre and post-operative orthopaedic patients regarding procedures, processes, outcome and follow up;

- f. Understand about long term rehabilitation of orthopaedic patients;
- g. Do case presentation of ward and OPD orthopaedic patients;

Psychiatry

- a) Acquire competency in
 - I. Psychiatric history taking, assessment including mental state examination and formulation of diagnosis and management
 - II. Assessment and formulation of management plan for alcohol and drug dependence.
 - III. Assessment, screening and management of patients presenting with acute psychiatric emergencies such as deliberate self harm/suicidal ideation/attempt, acute alcohol withdrawal symptoms including alcohol withdrawal seizures.
- b) Familiarize with
 - I. The diagnosis and management of common mental disorders in the country such as: Psychosis, Bipolar Affective Disorder, Depression, different types of Anxiety disorders including Dissociative Conversion Disorder and Somatoform Pain Disorder, Epilepsy, Alcohol and Drug Addictions as per the Mental Health Manual 2010.
 - II. With the use of common psychotropic drugs available in the essential drugs list such as anti-psychotic, antidepressant, anti-anxiety, mood stabilizer, anti-epileptic and drugs for detoxification of alcohol and drugs abuse and antidotes for drug overdose.

- c) One case presentation during ward round
- d) Record at least five different cases with different diagnosis seen in the Psychiatry OPD and Ward during the duration of posting.

Dermatology

- a) Acquire knowledge on:
 - i. History taking, diagnosis, investigation and management of common and emergency dermatological conditions;
- b) History taking, diagnosis, investigation and management of common dermatology disease.
- c) Familiarize with national protocols on management of STD and HIV infections

Ophthalmology

- a. Acquire competency on: Ocular bandaging, Lids repair; Syringing for FB, Fluorescein staining of cornea; Vision testing; Direct ophthalmoscopy
- b. Assessment and management of common ocular problems
- c. Observe and assist in Major Ophthalmic surgeries and follow up post operative cases.
- d. Familiarise with primary eye care services ;(community eye care)
- e. Case presentation in ward and OPD

Otorhinolaryngology (ENT)

- a) Acquire competency in: Management of epistaxis, Aural syringing, Ear toileting, Emergency airway, Removal of the foreign bodies from the nose and ear;

- b) Acquire competency on history taking, diagnosis, investigation and management of common and emergency ENT conditions;
- c) Observe and assist in various ENT surgeries including endoscopic procedures and tracheostomy, and post-operative follow up
- d) Understand the ENT rehabilitative programmes.
- e) Do case presentation on Ear, Nose and head and neck cases in Ward and OPD

Anaesthesia

- a. Learn a procedures and requirements for pre-anaesthetic check up;
- b. Develop competency to monitor patients during general anaesthesia;
- c. Familiarise with various types of anaesthetic equipments, anaesthetic agents, their mechanism of actions and side effects;
- d. Develop skills to monitor patients and understand the problems associated with anaesthesia and post operative recovery period;
- e. Observe and assist in endotracheal intubation, spinal anaesthesia and simple nerve blocks;
- f. Familiarize with the maintenance of anaesthetic records;
- g. Develop competency to recognize cardiac arrest and perform cardio-pulmonary brain resuscitation;
- h. Case presentation

Radio-diagnosis and Imaging:

- a. Develop competency to interpret normal and abnormal findings in X-rays and ultrasound;
- b. Gain knowledge on indications and contraindication for Radio-diagnostic investigations;
- c. Gain knowledge on patient and health workers safety on use of radio-diagnostic investigations;

Forensic Medicine and Toxicology

- a. Familiarise with General principles and concept of medical ethics and medical laws;
- b. Develop competency in performing examinations and writing forensic reports;
- c. Understand the procedures for medico legal case reporting;

Community Medicine

- a. Acquire competency on:
 - i. Childhood Immunization schedule;
 - ii. Diagnosis and management of adverse events following immunization (AEFI);
 - iii. Completing the mother and child health record book;
 - iv. Copper T insertion;
 - v. Antenatal & postnatal check up;
 - vi. Identification of high risk pregnancy and timely referral;
- b. Acquire knowledge on indication and contraindications of commonly practiced family planning methods (Copper-T, Oral

Contraceptive Pills (OCP), and Dehydro-medroxyprogesterone Acetate (DMPA);

- c. Observe Vasectomy procedures;
- d. Participate in health education programs;
- e. Develop skills in voluntary counselling for HIV testing;
- f. Familiarise with National guidelines and protocols for various public health programs (e.g., TB, HIV/AIDS, EPI, RH, Occupational Health, Nutrition, etc.);
- g. Familiarize with all reporting/recording forms and mechanism of reporting.

Transfusion medicine

Learning outcomes:

- a) *Blood Donor management*
 - I. Acquired knowledge on medical aspects in donor screening process to decide on suitability of a blood donor to donate blood.
 - II. Acquired knowledge and skills to adequately manage a blood donor adverse reaction.
 - III. Acquired knowledge and skills in conducting pre-donation and post –donation donor counselling and management of donors with ‘reactive’ test results of blood screening for transfusion transmitted infections(HIV, hepatitis B & C and syphilis)
 - IV. Acquired knowledge on the basic principles of immunology and immuno-hematology

b) *Clinical transfusion*

- I. Acquired adequate information on the National Blood Policy, national guidelines on 'Appropriate Clinical Use of Blood' and standard procedures
- II. Be able to practice the elements of the above guidelines.
- III. Acquired knowledge on the basic principles of transfusion medicine and clinical transfusion process
- IV. Acquire knowledge on the process and basic principles of transfusion medicine

Emergency medicine

- a. Acquire competency on emergency management of medical, surgical, orthopaedic and other emergency cases which will include basics of the following:
 - Basic Life Support (BLS)
 - Advanced Life Support (ALS)
 - Adult Cardiac Life Support (ACLS)
 - Paediatric Advanced Life Support (PALS)
 - Neonatal Advanced Life Support (NALS)
 - Advanced Trauma Life Support (ATLS)
 - Patient Assessment (pre-hospital and In-hospital)
 - Emergency/disaster response
 - Transportation and communication
 - Documentation
 - Skills related to emergency
- b. Case presentation