



# Home Health Care Medicine Diploma

2026



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

— In The Name of Allah —

# PREFACE

- The primary goal of this document is to enrich the training experience of postgraduate trainees by outlining their learning objectives for becoming independent and competent future practitioners.
- This curriculum may contain sections outlining some regulations of training; however, such regulations need to be sought from the “General Bylaws of Training in Postgraduate Programs” and “Executive Policies” published by the Saudi Commission for Health Specialties (SCFHS), which can be accessed online through the official SCFHS website. In case of discrepancies in regulation statements, the one stated in the most updated bylaws and executive policies will be the reference to apply.
- As this curriculum is subject to periodic refinement, please refer to the electronic version posted online for the most updated edition at: [www.scfhs.org.sa](http://www.scfhs.org.sa)

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## II. COPYRIGHT STATEMENTS

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We would also like to acknowledge that the CanMEDS framework is a copyright of the Royal College of Physicians and Surgeons of Canada and that many of the descriptions' competencies have been acquired from their resources. (Please refer to: Frank JR, Snell L, Sherbino J, editors. CanMEDS 2015 Physician Competency Framework.

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# IV. INTRODUCTION

## Home Health Care (HHC) Overview

Home health care (HHC) is a vital component of the health care continuum, delivering services directly to individuals in their homes. Its primary goals are to promote, maintain, or restore health and maximize independence, while minimizing the effects of disability and illness. HHC addresses diverse patient care needs through a collaborative approach involving patients, their families, and health care professionals. Utilizing advancements in medical technology and telehealth, HHC provides high-quality, personalized care that adheres to international best practices.

## Objectives of HHC

1. **Enhance Health and Quality of Life:** Provide comprehensive health care, nursing, and rehabilitative services to improve overall patient well-being.
2. **Reduce Institutionalization:** Decrease the need for hospitalization, nursing home admissions, and other institutional placements.
3. **Support Caregivers:** Offer essential resources and support for family members and informal caregivers.
4. **Minimize Emergency Visits:** Reduce emergency department visits through proactive care and monitoring.
5. **Shorten Hospital Stays:** Decrease hospital length of stay and prevent readmissions.
6. **Comfortable End-of-Life Care:** Enable terminal patients to spend their final days at home comfortably.
7. **Enhance Functional Potential:** Improve the functional potential of patients reliant on life-sustaining devices.

## HHC in Saudi Arabia

HHC services in Saudi Arabia began in 1980, and have evolved significantly over time. Key milestones include the establishment of programs by the King Faisal Specialist Hospital and Research Center in 1991, King Fahad National Guard Hospital in 1995, and Ministry of Health in 2009. These programs are

regulated and involve a multidisciplinary team of health care professionals who provide comprehensive care in patients' homes.

## Current Trends and Future Needs

1. **Increasing Demand:** Driven by the aging population and the prevalence of chronic diseases, HHC is increasingly being sought for its convenience and effectiveness.
2. **Patient Preference:** Many patients prefer receiving care at home for comfort and convenience.
3. **Cost-Effectiveness:** HHC is often more cost-effective than hospital care, reducing the costs associated with prolonged hospital stays and emergency visits.
4. **Improved Outcomes:** Studies have indicated that HHC can lead to better clinical outcomes, such as lower readmission rates and better chronic disease management.

## Challenges and Future Directions

To meet growing demands, the focus should be on:

- **Technological Integration:** Incorporating new medical technologies and pharmaceutical advancements into home care.
- **Professional Training:** Enhancing health care workers' skills through specialized training programs.
- **Infrastructure Expansion:** Extending services to remote and underserved areas.
- **Regulatory Framework:** Developing policies to standardize practices and ensure patient safety.

## Services Provided by HHC

HHC offers a wide range of services, including:

- **Medical Services:** Physician visits and treatment plans.
- **Nursing Care:** Skilled nursing services and medication management.
- **Therapies:** Physiotherapy, occupational therapy, speech therapy, and respiratory therapy.



- **Social and Support Services:** Counseling, nutritional counseling, and supportive psychotherapy.
- **Laboratory and Equipment Services:** Diagnostic tests and provision of medical equipment.

## Who Needs HHC?

HHC is suitable for diverse populations, including:

- **Individuals of All Ages:** From pediatric to geriatric patients.
- **Post-Hospital Discharge Patients:** Those needing continued medical care at home.
- **Chronic Disease Management:** Particularly for older patients with functional impairments.
- **Eldercare:** Assistance with daily activities and medication management.
- **Postnatal Care:** Support for new mothers and newborns.
- **Palliative and End-of-Life Care:** For terminally ill patients.
- **Rehabilitation and Recovery:** Post-surgery or injury recovery.
- **Mental Health Support:** For those needing psychiatric care and counseling.

## Physician's Role in Home Health Care (HHC)

Home health care (HHC) begins with a physician recognizing that a patient's condition and resources are suitable for home-based care. The physician collaborates with the referring physician, patient, family, and other members of the home care team to develop and prescribe a comprehensive home care treatment plan that may involve various resources. The physician is responsible for the ongoing supervision of care and determining its medical necessity.

## Initial Evaluation and Care Plan Development

- **Patient Evaluation:** Initial patient evaluation is crucial for the success of the care plan. This evaluation assesses the patient's condition, the home environment, and the ability of the patient or caregiver to carry out the care plan.
- **Team Collaboration:** The care plan is developed in consultation with the home care team, ensuring that all necessary resources are identified and integrated.

- **Physician's Support:** The physician's support and encouragement are essential for the HHC team and patient compliance with the care plan.

### Ongoing Supervision and Medical Management

- **Continuous Supervision:** The physician provides ongoing supervision, adjusting the care plan as needed to ensure optimal patient outcomes.
- **Medical Management:** Effective medical management in the home focuses on optimizing the patient's independence and utilizing medical and social resources to minimize the effects of illness and disability. This involves a thorough understanding of the patient's functional abilities, family assistance, and environmental factors.



- **Distinction from Hospital Care:** Unlike medical management in a hospital or clinic, home care emphasizes the patient's functional abilities and the role of family assistance, making the home environment a critical factor in the care plan.

### Assessments and Cultural Sensitivity

- **Thorough Assessments:** Regular assessments are necessary to evaluate the patient's and caregiver's ability to implement the care plans, including the risk of caregiver burnout. These assessments help identify new medical and psychosocial factors that may not have been evident in the hospital and prevent further disability.
- **Nutritional Risk Assessment:** Especially in older patients and those with chronic illnesses, nutritional risk assessments are a vital part of the evaluation process.
- **Screening Assessments:** These include subjective reports from the patient and family, along with the physician's observations during physical examinations. The process should be sensitive to cultural issues that can influence outcomes.

### Importance of Comprehensive Evaluation

- **History and Physical Examination:** The evaluation starts with a traditional history and physical examination, supplemented by appropriate laboratory tests.
- **Holistic Approach:** The evaluation process should consider the overall well-being of the patient, including physical, mental, and social aspects, to develop a comprehensive and effective care plan.

The physician's role is integral to ensuring the success of home health care, providing continuous oversight, and adapting the care plan to meet the evolving needs of the patient.

### Rationale for HHC Diploma for Physicians

To enhance patient care at the home health care level and provide the best continuous and comprehensive health care for patients at home, it is essential to ensure professional fulfillment for HHC physicians. However, few physicians in the HHC sector currently receive formal training in this field. Therefore, a structured training system must be developed to ensure that HHC physicians acquire the necessary skills early in their careers.

## Program Duration

The Home Health Care Diploma is a two-year program designed to equip physicians with educational and clinical experience based on international HHC standards. The program focuses on structured training and close supervision. Candidates will undergo clinical rotations in hospitals and HHC departments and participate in teaching sessions.

## Aim of the Program

The Home Health Care Diploma aims to improve the quality of home health care services provided by graduating competent HHC physicians who deliver comprehensive and continuous medical care at home and can function independently.

## General Objectives

By the end of the training, candidates will be able to:

- **Identify HHC Principles:** Gain sound knowledge in the principles of home health care.
- **Effective Communication:** Communicate effectively with patients, relatives, and colleagues.
- **Ethical Standards:** Uphold high moral and ethical standards.
- **Continuous Learning:** Educate and update themselves and others in their field.
- **Comprehensive Evaluation:** Perform thorough and appropriately oriented history taking, physical examinations, and initial evaluations of patients.
- **Manage Common HHC Problems:** Handle common problems in HHC and know various management alternatives.
- **Preventive Care:** Provide appropriate preventive care for HHC patients.
- **Investigations:** Select relevant investigations logically and conservatively, and interpret the results accurately.
- **Care Plans:** Formulate reasonable and comprehensive care plans.
- **Procedural Skills:** Develop good skills in common diagnostic and therapeutic procedures, particularly in geriatric medicine.
- **Palliative Care:** Create care plans for terminally ill patients based on comprehensive interdisciplinary assessments of the patient and family.
- **Wound Care:** Develop good skills in wound care and using dressing materials.



- **Emergency Management:** Recognize and manage emergency situations appropriately.
- **Interdisciplinary Advice:** Advise colleagues from other specialties on HHC-related problems.
- **Medical Records:** Maintain orderly and informative medical records.

This program ensures that HHC physicians are well-prepared to meet the demands of home health care by providing high-quality, patient-centered care in the home environment.

## 1. What Is New in This Edition?

The updates aim to provide trainees with the best possible training, equipping them with essential skills and experience for their clinical practice.

Following are the key changes:

- Updated Content: All sections, including the introduction, have been refreshed with the latest best practices.
- Modified Rotation Schedule: Timing, duration, and types of rotations have been removed. Some of the rotations were canceled and new rotations were added, as follows:
  1. Workshops and Simulation:
    - Duration: 3 weeks
    - Change: Increased from 1 week to cover more practical training, and new topics have been added as the duration has been extended.
  2. Emergency Rotation:
    - Duration: 4 weeks
    - Change: Reduced from 6 weeks to provide more chances of exposure to other rotations.
  3. Family Medicine Rotation:
    - Duration: 4 weeks
    - Change: Replacing pediatric neurology with family medicine rotation.

Evaluation: Updated to comply with new rules of the Saudi Commission of Health Specialties.

# V. ABBREVIATIONS AND DEFINITIONS OF TERMS USED IN THIS DOCUMENT

Rotation	The overall time that the resident will spend in a specific specialty to acquire specific competencies
D1	A trainee in the first year of training
D2	A trainee in the second year of training
Mandatory Rotation	Compulsory rotation for the candidate, without completing which he/she cannot be promoted to the next level or graduate from the program
Elective Rotation	The rotations that the candidate may choose from any medical specialty
HHC	Home health care
ICU	Intensive care unit
PICU	Pediatric intensive care unit
ER	Emergency room



# VI. PROGRAM ENTRY REQUIREMENTS

**For the updated program entry requirement,** please refer to the executive policy of the SCFHS on admission and registration.

# VII. LEARNING AND COMPETENCIES

## 1. Introduction to Learning Outcomes and Competency-Based Education

### Overall goal

To train specialists who can competently practice HHC independently and apply HHC principles, and mastery of topics is incorporated into the program at various academic activity venues.

### Medical Expert

At the end of the training, the candidate will be able to:

- Define HHC and describe its basic principles.
- Demonstrate knowledge and skill in conducting home visits to patients.
- Describe the physician's role in managing patients in their homes.
- Describe the physical, psychological, social, and spiritual issues faced by patients and their families at home.
- Formulate a systematic approach to symptom assessment and handling all aspects.
- Develop a management plan that appropriately balances disease specific treatment and symptom management according to the individual needs of the patient and the family.
- Monitor the efficacy of symptom management plans at home.
- Plan appropriate management of physical symptoms, particularly pain, dyspnea, constipation, skin care, mouth care, delirium, nausea, and vomiting.
- Demonstrate the procedures for investigating emergencies.
- Recognize and describe various emergencies in home health care.
- Conduct appropriate investigation.
- Analyze emergency situations to determine the best course of action.
- Develop comprehensive management plans for identified emergencies.



- Assess the effectiveness of implemented management strategies and make necessary adjustments.
- Identify psychological issues associated with life-threatening illnesses and strategies that may be useful in addressing them, particularly anxiety and depression.
- Identify the social and existential needs confronting the patient and families and strategies that may be useful in addressing them.
- Develop a proactive approach to managing patient and family expectations and needs.
- Apply a holistic approach to caring for patients and their families (communicator).
- Assist in the *rehabilitation process of patients at home*.
- Apply effective communication skills in dealing with patients and their families, including skills in delivering bad news.
- Develop an appropriate holistic management plan.
- Work with the patient and family to establish common, patient-centered care goals (collaborator).
- Define the roles of other disciplines in providing medical care at home.
- Participate in the interdisciplinary care of patients, including family conferences.
- Communicate effectively with other team members.
- Communicate effectively in consultation and communication skills by working with referring physicians from other specialties.
- Define the community resources available to support patients in their homes.
- Incorporate accepted standards of medical care and evidence-based decision-making into the practice of caring for patients at home.
- List the elements comprising good palliative home care where needed.
- Conclude the knowledge of the field of biomedical ethics and its principles.
- Outline a general framework for ethical decision-making.
- Ensure that patients' privacy and dignity are maintained
- Act as an effective advocate for the rights of patients and their families in clinical situations involving serious ethical considerations (scholar).
- Act as a role model for other residents and physicians.

- Become a role model by demonstrating skillful care at home.
- Show integrity, honesty, and compassion in the care of patients.

### Manager

At the end of the training, the candidate will be able to:

- Define community resources available to support patients in their homes.
- Work effectively in home health care programs.
- Assist institutional home health care programs to develop standards of care consistent with accepted standards.
- Articulate the philosophical basis of effective home health care services.
- List the current barriers in providing better home health care.
- Incorporate accepted standards of home health care and evidence-based decision-making into the practice of caring for patients and their families at home.
- Utilize the specific available resources to assist with the care of patients (health).



## Health Advocate

At the end of the training, the candidate will be able to:

- List the social and environmental factors relevant to home health care patients.
- Enumerate different models of home health care delivery and their utilization.
- List the current barriers to providing effective care to patients at home.
- Advocate for the needs of home care patients.
- Ensure that patients' privacy and dignity are maintained.
- Act as an effective advocate for the rights of patients and their families in clinical situations involving serious ethical considerations.

## Scholar

At the end of the training, the candidate will be able to:

- Act as a role model for other residents and physicians.
- Become a role model by demonstrating skillful care for the dying.
- Access and use the relevant literature to help solve clinical problems.
- Apply critical appraisal skills when examining the literature on palliative medicine.

## Professional

At the end of the training, the candidate will be able to:

- Ensure commitment to a patient and family from the time of consultation for until the end of care.
- Act with integrity, honesty, and compassion in the care of patients.
- Apply self-awareness and self-care in caring for ill patients at home.

## Communicator

At the end of the training, the candidate will be able to:

- Become competent in completing a relevant and organized medical history.
- Explain the medical issues to the patient and family members in clear and non-medical/technical language.
- Communicate effectively with other team members and physicians.
- Synthesize and document appropriately concise and informative consultation reports, progress notes, and discharge summaries.

## Collaborator

At the end of the training, the candidate will be able to:

- Develop and Maintain meaningful relationships and effectively communicate with patients, families, physicians, and other health professionals.
- Identify needs for specialist input and consult for appropriate expertise.
- Play a leadership role on the interdisciplinary team and effectively lead team conferences.
- Participate actively in family conferences.
- Promote patient autonomy and the involvement of their families in decision-making.

## 2. Program Duration

It is a two-year full-time program.



### 3. Program Rotations

Training Year	Mandatory core rotations*			Elective rotations**		
	Rotation name	Duration	Setting	Rotation name	Duration	Setting
D1	• Introductory Course/Workshops and Simulation	4 8 8	- Activity, simulation (in center)	• Elective rotation • Pain management • Ophthalmology • ENT • Dermatology • Radiology • Others	4	
	• Home Health Care	8	- Home health care service			
	• General Pediatrics	4	- Inpatient, outpatient			
	• Internal Medicine	4	- Inpatient, outpatient			
	• Family Medicine	4	- Inpatient, outpatient			
	• Rehabilitation	4	- Outpatient			
	• Adult Emergency	4	- Inpatient, outpatient			
	• Psychiatry		- Inpatient			
	• Annual Leave		- Inpatient, outpatient			
D2	• Adult Pulmonology	4	- Inpatient, outpatient	• Elective rotation • Pain management • Ophthalmology • ENT • Dermatology • Radiology • Others	4	
	• Adult Endocrinology	4	- Inpatient, outpatient			
	• Pediatric Intensive Care	4	- Inpatient			
	• Adult Intensive Care	4	- Inpatient			
	• Adult Neurology	4	- Inpatient			
	• Palliative Care	4	- Inpatient, outpatient			
	• Adult Cardiology	16	- Inpatient, outpatient			
	• Home Health Care	4	- Inpatient, outpatient			
	• Annual Leave		- Home health care service			

(\*Mandatory core rotation: Set of rotations that represent program core components and are mandatory to do.

\*\*Elective rotation: Set of rotations related to the specialty, as determined by the scientific council/committee, and the trainee is required to do some of them

## 4. Mapping of learning objectives and competency roles to program rotations:

### Introductory Course of Home Health Care:

#### Duration:

1 week

#### Description:

In this course, the trainee will understand the seven CanMEDS—home health care core competencies, the structure of the program, and assessment. The general goal of this rotation is to gain knowledge about the definition and main principles of providing health care in other settings outside the hospital.

#### Objectives:

The specific objectives of this rotation are as follows:

At the end of the training, the trainee will be able to:

- Identify the training objectives, rules, and regulations.
- Explain the training and examination regulations.
- Learn the principles of adult learning.
- Explain all forms of assessments (log book, MiniCEX, etc.).
- Define home health care.
- Identify the basic principles of home health care.
- Identify the role and scope of a home health care doctor.
- Identify the principles of communication skills.
- Acquire the knowledge and skills needed to conduct home visits to patients.
- Define the physician's role in managing patients in their homes.
- Identify the principles of quality improvement and importance of patient safety in home health care.
- Apply infection control measures in home health care.
- Prepare an effective presentation.

### Home Health Care Rotation (HHC-D1)

The general goal of the rotation is to gain experience and expertise in the assessment, investigation, and appropriate management of patient care at home or in other settings outside of the hospital. Residents are required to



develop a core pool of 8–12 home health care patients, who will be followed up over an extended period during their training.

**Duration:**

8 weeks

**Activity types:**

Home health care services

**Objectives:**

- Build knowledge on accessing community resources and working with diverse team members.
- Become familiar with decision-making and family caregiver support at home.
- Develop independent skills in home assessment and interventions that are practical, effective, and appropriate to the patient's wishes.
- Develop communication skills with families, community team members, and family practitioners regarding ongoing patient management at home.
- Plan and anticipate medical needs at home according to the patient's condition.
- Identify issues in supporting patients at home while considering different cultures, spiritual beliefs, and traditions.
- Develop skills in working with patients' families and demonstrate the elements of good home care.
- Acquire knowledge about and competencies for conducting home visits to patients.
- Explain the community resources available to support patients in their homes.
- Apply a holistic approach to caring for patients at home and their families.
- Explain common interventions' indications, contraindications, effectiveness, and side-effects.
- Integrate relevant basic, clinical, and evidence-based information in the care of patients.
- Manage common acute problems through comprehensive "biopsychosocial" care.

- Provide urgent basic life support interventions for emergencies and effectively participate in rapid response systems to facilitate better clinical outcomes and proper resource utilization.
- Manage chronic illnesses through well-structured, continuous, and evidence-based health care to control symptoms, prevent complications, and improve quality of life.
- Perform essential procedures (diagnostic and therapeutic) to manage acute problems.



- a. **Knowledge:** The trainee should apply an approach to the management of different physical symptoms and disorders at home, including but not limited to anemia, anxiety disorders, bronchial asthma/COPD, convulsion disorders, dehydration, dementia, depression, dermatitis (atopic, contact), diabetes mellitus, older adult abuse, dyslipidemia, electrolyte disturbances, heart failure, hypertension, pressures ulcer prevention and management, incontinence, insomnia, respiratory failure, renal failure, thyroid disease, upper and lower respiratory tract infections, UTI /renal stone, venous embolism, and coagulation disorders.
- b. **Skills:** The trainee is advised to perform the following procedures:
- Naso-gastric tube (NGT) insertion.
  - Foley catheter insertion and management.
  - Demonstrate inhaler techniques.
  - Intramuscular, intravenous, subcutaneous, and intra-dermal injection.
  - Obtaining arterial blood gas.
  - Perform swabs (throat, eye, ear, wound, vaginal, urethral, etc.).
  - Peripheral intravenous line, adult, and child.
  - Wound care: debridement and dressing.
  - Ostomy care.
  - Home ventilator care
  - Tracheostomy care.
  - Basic physiotherapy.
  - Palliative care.
  - INR mentoring.
  - Insulin therapy.

## Home Health Care Rotation (HHC-D2)

The general goal of the rotation is to gain experience and expertise in the assessment, investigation, and appropriate management of patient care at home or in other settings outside of the hospital. Residents must develop a core pool of 16–24 home health care patients, who will be followed up over an extended period during their training.

### Duration:

16 weeks

## Activity types:

Home health care services

## Objectives:

- Become experienced with accessing community resources and working with various team members.
- Become familiar with decision-making and family caregiver support at home.
- Develop independent skills in home assessment and interventions that are practical, effective, and appropriate to the patient's wishes.
- Develop communication skills with families, community team members, and family practitioners regarding ongoing patient management at home.
- Become experienced in planning and anticipating medical needs at home according to the patient's condition.
- Identify issues in supporting patients at home while considering different cultures, spiritual beliefs, and traditions.
- Master the skills in working with patients' families and demonstrate the elements comprising good home care.
- Acquire knowledge about and competencies to conduct home visits to patients.
- Become experienced in approaching the community resources available to support patients in their homes.
- Apply the role of physicians and specialists in caring for ill patients at their homes, and supporting the home care team.
- Apply a holistic approach to caring for patients at home and their families.
- Explain common interventions' indications, contraindications, effectiveness, and side-effects.
- Integrate relevant basic, clinical, and evidence-based information in the care of patients.
- Manage common acute problems through comprehensive "biopsychosocial" care.
- Provide urgent basic life support interventions for emergencies and effectively participate in rapid response systems to facilitate better clinical outcomes and proper resource utilization.



- Manage chronic illnesses through well-structured, continuous, and evidence-based health care to control symptoms, prevent complications, and improve quality of life.
- Apply an approach to managing different physical symptoms and disorders at home, including dyspnea, cough, skin care, mouth care, terminal agitation, delirium, fatigue, anorexia, nausea and vomiting, constipation, depression, anxiety, and the syndrome of imminent death.
- Develop a management plan that appropriately balances disease-specific treatment and symptom management according to the individual needs of the patients at home and their families.
- Perform essential procedures (diagnostic and therapeutic) to manage acute problems.

- a. **Knowledge:** The trainee should master the management of the general HHC domains at home with a focus on anemia, anxiety disorders, bronchial asthma/COPD, convulsion disorders, dehydration, dementia, depression, dermatitis (atopic, contact), diabetes mellitus, older adult abuse, dyslipidemia, electrolyte disturbances, heart failure, hypertension, pressure ulcer prevention and management, incontinence, insomnia, respiratory failure, renal failure, thyroid disease, upper and lower respiratory tract infections, UTI /renal stones, venous embolism, and coagulation disorders.
- b. **Skills:** The trainee should be able to perform the following procedures:
- b. **Skills:** The trainee should be able to perform the following procedures:
- Naso-gastric tube (NGT) insertion.
  - Foley catheter insertion and management.
  - Demonstrate inhaler techniques.
  - Intramuscular, intravenous, subcutaneous, and intra-dermal injection.
  - Obtaining arterial blood gas.
  - Perform swabs (throat, eye, ear, wound, vaginal, urethral, etc.).
  - Peripheral intravenous line, adult, and child.
  - Wound care: debridement and dressing.
  - Ostomy care.
  - Home ventilator care
  - Tracheostomy care.
  - Basic physiotherapy.
  - Palliative care.
  - INR mentoring.
  - Insulin therapy.

## Hospital Rotations

A significant number of acute and chronic medical problems are frequently encountered in home health care. Therefore, to experience the roles of HHC physicians and the scope of HHC, residents must have adequate specialty experience. This will enable them to gain confidence and competency in the assessment and overall management of common medical problems.

At the end of the rotation, the resident should acquire the relevant knowledge, skills, and attitudes, and demonstrate core competencies, as described below:



## Guidelines

- Hospital rotations can be done in any sequence after the introductory course.
- During the hospital rotation, the resident should comply with all responsibilities including—but not limited to—on calls and procedures.
- Rotations including inpatient settings cannot be changed to the outpatient department (OPD)/ field.

## Content

Residents should acquire the core knowledge and skills expected from the Saudi Diploma of HHC physicians during appropriate hospital rotations, as described for each rotation.

## General Internal Medicine Rotation

### Duration:

8 weeks

### Description:

The General Internal Medicine rotation is a mandatory core rotation for all residents. During this rotation, residents will develop all CanMEDS core competencies while acquiring essential skills for diagnosing and managing diverse medical conditions affecting adolescents and adults. The focus is on both undifferentiated patient problems and issues arising in patients with pre-existing conditions. Residents will practice progressive responsibility, self-directed learning, and effective patient and family communication. Therefore, they should serve as the primary care providers for patients with multiple comorbidities.

### Objectives:

By the end of the training, trainees will be able to:

- **Develop CanMEDS Core Competencies:** Master all seven CanMEDS competencies, with emphasis on medical expertise, communication, collaboration, leadership, health advocacy, scholarship, and professionalism.
- **Identify Basic Sciences:** Acquire an understanding of relevant basic sciences, including pathophysiology, pharmacology, and microbiology related to common medical conditions.

- **Order and Interpret Investigations:** Order appropriate and selective investigations and interpret the findings in the context of patients' complaints.
- **Perform Comprehensive Health Assessments:** Conduct complete health assessments, including focused physical examinations and mental state evaluations.
- **Formulate Differential Diagnoses:** Formulate appropriate provisional and alternative diagnoses for key presenting problems and underlying conditions.
- **Provide Immediate Management:** Offer immediate and appropriate management to patients requiring urgent care.
- **Implement Preventive Measures:** Discuss and apply primary, secondary, and tertiary preventive measures.
- **Manage Dialysis Patients:** Manage medical emergencies and prescribe medications for peritoneal dialysis/hemodialysis patients.
- **Diagnose and Manage Gastroenterological Conditions:** Diagnose and manage acute and chronic gastroenterological conditions.
- **Perform Medical Procedures:** Perform procedures safely and competently, including:
  - Recognition of indications and contraindications.
  - Obtaining informed consent.
  - Ensuring patient comfort, privacy, and adequate pain control.
  - Documentation.
  - Post-procedure follow-up and handover.
- **Document Patient Findings:** Maintain accurate and timely medical records.
- **Communicate Effectively:** Proactively communicate and liaise with patients and families regarding the patient's condition, management plan, and disposition.
- **Collaborate with Health Care Professionals:** Respect and collaborate with other health care professionals, including nurses, pharmacists, and allied health professionals.
- **Implant Health Promotion concept:** Encourage prevention and health promotion, including dietary factors, lifestyle modification, and smoking cessation during every consultation.



- **Develop Patient-Centered Care:** Provide care that values individual and family preferences, and respects societal and religious norms.

### Core Topics:

- **Hematology:** Anemia, coagulation disorders, venous thromboembolism.
- **Rheumatology:** Arthritis, osteoarthritis, systemic lupus erythematosus (SLE).
- **Infectious Diseases:** Pneumonia, osteomyelitis, pyelonephritis, tuberculosis, common viral infections (e.g., influenza, hepatitis, brucellosis, dengue fever).
- **Gastroenterology:** GERD, gastritis, peptic ulcer disease, ascites.
- **Nephrology:** Chronic kidney disease, acute and chronic renal failure, management of dialysis patients.
- **Geriatrics:** Common geriatric syndromes (dementia, delirium, incontinence, malnutrition, polypharmacy, frailty, and constipation).

## General Pediatric Rotation

This rotation outlines the core principles of providing exemplary clinical care to pediatric patients. Upon completion of this rotation, residents will become familiar with the generic competencies related to clinical practice in pediatrics. These include the history and examination of the child, effective communication with children and their families, and principles of prescribing medicines for babies and children. Residents are expected to participate in local clinical governance processes, including evidence-based practices and audits.

### Duration:

8 weeks

### Activity types:

Rotation in general pediatric inpatient units or major subspecialties based on hospital structure.

### Objectives:

- Outline the key features of a pediatric history in different age groups.
- Master effective communication techniques with children and their families to take an age-appropriate history.
- Outline the key differences in the examination of children in different age groups.
- Master an accurate examination of children and babies in appropriate settings.
- Document findings in an accurate, logical, and legible medical record.
- Write safe medicine prescriptions according to the child's weight or age.
- Discuss the physiological milestones of physical growth and mental development among pediatric age groups.
- Explain common interventions' indications, contraindications, effectiveness, and side-effects.
- Integrate relevant basic, clinical, and evidence-based information in the care of patients.
- Generate management plans for common newborn conditions related to complications during pregnancy, delivery, and infancy.
- Manage common acute problems through comprehensive "biopsychosocial" care.



- Provide urgent basic life support interventions for emergencies and effectively participate in rapid response systems to facilitate better clinical outcomes and proper resource utilization.
- Manage chronic illnesses through well-structured, continuous, and evidence-based health care to control symptoms, prevent complications, and improve quality of life.
- Perform essential procedures (diagnostic and therapeutic) to manage acute problems.
- Calculate the appropriate dosage required for drug and fluid prescriptions.
- a. **Knowledge:** Residents should master the necessary clinical information to manage the most common conditions in pediatric patients, with a particular focus on pediatric complex care that represents an integral component of HHC for pediatric patients, such as:
  - Oral care for children with medical complexity.
  - Implementation of best practices for enteral tube feedings.
  - Autism, developmental, and behavioral disorders.
  - Physical medicine and rehabilitation.
  - Palliative care.
  - Peri-operative care.
  - Wound and stoma care.
  - Myelomeningocele disorder.
  - Spinal muscular atrophy (SMA).
  - Metabolic bone disorders.
  - Muscular dystrophy disorders.
  - Leukodystrophy.
  - Sleep disorders.
  - Down syndrome.
- b. **Skills:** The trainee should be able to perform the following procedures for pediatric patients:
  - Foreign body removal from ears, nose, and skin.
  - Naso-gastric tube (NGT) insertion.

- Foley catheter insertion and management.
- Demonstrate inhaler techniques.
- Intramuscular, intravenous, subcutaneous, and intra-dermal injection.
- Peripheral intravenous line.
- Wound and ostomy care.

## Family Medicine Rotation

### Duration:

4 weeks

### Description

Trainees on rotation in family medicine departments must develop all CanMEDS core competencies while learning the basic skills required to diagnose and manage diverse common conditions affecting pediatric, adolescent, adult, and geriatric patients. Trainees should focus on undifferentiated patient problems as well as those that emerge in previously diagnosed patients. Trainees should practice progressive responsibility and self-directedness in dealing with patients and their families, and be able to act as primary care providers for patients with multiple comorbidities.

### Objectives

The goal of this rotation is for the trainees to gain experience in evaluating and managing outpatients with a broad spectrum of common and chronic diseases.

It is necessary to integrate current biomedical knowledge, with a psychological and social understanding of health and illness, into patient care. Trainees should employ a holistic approach in providing health care services to patients, their families, and communities.

- Demonstrate a thorough understanding of relevant basic sciences, including pathophysiology, drug therapy, and the microbial basis of diseases relating to the key presenting problems and diseases.
- Perform complete clinical patient assessments, including taking history and conducting relevant physical examinations.
- Formulate appropriate provisional diagnoses and alternative diagnoses of key presenting problems and underlying conditions.
- Order appropriate and selective investigations and interpret the findings in the context of patient problems.



- Address all problems with which patients present and be able to address unexpected occurrences.
- Apply knowledge of common problems, wellness, and prevention within the framework of the family medicine approach to patient care (biopsychosocial model)
- Apply a holistic approach to health care, exemplified by the following key components:
  - Biopsychosocial aspects of care.
  - Comprehensive care.
  - Continuity of care.
  - Context of care.
  - Coordination and integration of care.
- Establish and maintain the clinical knowledge, skills, and attitudes required to meet the needs of the home health care practice and serve the patient population.
- Provide continuous comprehensive care throughout the life cycle, incorporating appropriate preventive, diagnostic, and therapeutic interventions.
- Facilitate the coordination of patient care, including collaborations and consultations with other health professionals and caregivers.
- Conduct effective consultations within the context of consultation models.
- Consciously enhance the patient–physician relationship, recognizing the characteristics of therapeutic and caring relationships.
- Manage time and resources effectively.
- Document patient findings in the medical records in a legible and timely manner.
- Advocate for patients’ and communities’ health care needs.
- Demonstrate evidence-based health care in patient management.
- Integrate clinical knowledge and effective patient-centered care skills into patient care.
- Apply professionalism and ethics in making decisions regarding individual patient care.
- Act professionally during the care of patients and their families and in interactions with health care teams and communities.

## Knowledge

Demonstrate a thorough understanding of relevant basic sciences, including anatomy, physiology, pathophysiology, drug therapy, and the microbial basis of diseases of the key presenting problems and diseases.

Understand the basic pharmacology and management of essential medications for conditions such as:



- Common rashes/viral exanthems
- Constipation/diarrhea
- Common benign and malignant skin lesions
- Asthma
- Anemia
- Anxiety
- Arthritis
- Cystitis
- Depression
- Dermatitis
- Dizziness
- DM
- Dyslipidemia
- Eczema
- Emphysema/COPD
- Enuresis
- Esophagitis/gastritis
- Gastroenteritis/dehydration
- Gout
- Headache
- Hypo/hyperglycemia
- Hypothyroidism/hyperthyroidism
- Metabolic syndrome
- Osteoarthritis
- Upper respiratory tract infections
- Otitis media
- Peptic ulcer disease
- Pharyngitis/sore throat
- Pneumonia
- Prostatitis
- Pyelonephritis
- Sprains/strains

- Urethritis
- Urinary incontinence

### Skills

- Anoscope/proctoscopy
- Anterior nasal packing
- Application of eye patch
- Bag-and-mask ventilation
- Cardiac defibrillation
- Drainage acute paronychia
- Dressing and wound care
- Electrocautery of skin lesions
- Incision and drainage of superficial abscesses
- Infiltration of local anesthesia
- Intradermal injection
- Intramuscular injection
- Partial toenail removal
- Peripheral intravenous line (adult and child)
- Release subungual hematoma
- Removal of cerumen
- Removal of a foreign body in the eyes, ears, nose, and skin
- Skin closure techniques (suturing and non-suturing techniques)
- Skin scraping for fungus determination
- Subcutaneous injection
- Use of Wood's lamp
- Venipuncture
- Wound debridement
- Placement of the transurethral catheter

### Psychiatry Rotation

#### Duration:

4 weeks



## Description:

This rotation is mandatory and is the core rotation for all residents. Residents on rotation in psychiatry must develop all CanMEDS core competencies while learning the basic skills required for the diagnosis and management of diverse mental conditions. Training takes place in in-out patient settings and emergency departments in psychiatry institutes.

## Objectives:

Upon completion of this rotation, the trainee should be able to perform the following roles:

- Identify illness presentation, illness experience, appropriate assessment, and management of the range of psychiatric illnesses encountered in inpatient settings, including affective disorders, psychotic disorders, and eating disorder.
- Demonstrate the knowledge of body and central nervous system anatomy and function necessary to identify the pathophysiology and psychopharmacology of the range of illnesses encountered in this setting.
- Identify normal and abnormal psychological and neurophysiological development throughout the lifespan as it affects patients in the presentation and experience of psychiatric illnesses.
- Make a comprehensive diagnosis using the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V), particularly the diagnostic criteria for major psychiatric syndromes including schizophrenia, bipolar I and II disorders, major depression, anxiety disorders, and personality disorders.
- Acquire knowledge of the natural course of psychiatric illness in the adult population.
- Implement effective interviewing skills to enable professional relationships and therapeutic alliances with psychiatrically ill patients and their families.
- Implement effective history taking and physical examination skills including contact date and time, patient profile, history of present illness, past medical and surgical history, developmental history, mental status, and appropriate physical examination from patients and their families in the above-mentioned setting.
- Acquire the skills and ability to correlate, evaluate, prioritize, and synthesize the information gathered in an assessment in the form of bio-psycho-socially oriented problem formulation. This would include the following:

- Select appropriate applied knowledge via critical appraisal of the literature.
- Formulating a reasonable problem-oriented management plan.
- Generating a rational plan for diagnostic and therapeutic measures and communicating this to the patient and his or her family.
- Interact and plan appropriately in collaboration with other mental health care professionals and management of the patient.
- Evaluate and modify diagnosis and management plans appropriately via periodic assessment of patients' responses.
- Maintain proper medical records.
- Assess the quality of care in the provision of mental health care.
- Master appropriate consultation skills in collaborative communication and interaction with other health care professionals involved in the patient's care.
- Recognize personal limitations that may interfere or limit patient care, such as knowing when to ask for help or cease work and return home.
- Master the technical skills involved in performing thorough mental status assessments, limited neuropsychological assessments, and ECT; gain intravenous access; and draw blood.
- Master the knowledge and skills required to use the provincial Mental Health Act.
- Act with trustworthiness and honesty with patients.
- Recognize personal limitations and a willingness to call on others with special expertise when necessary.
- Demonstrate an appreciation of the moral and ethical implications of various treatments and research as they relate to patient care.

## Emergency Medicine Rotation

### Duration:

4 weeks

### Description:

The emergency medicine rotation is a mandatory core rotation for all residents. During this rotation, residents must develop all CanMEDS core competencies while acquiring essential skills for diagnosing and managing diverse emergency conditions affecting adolescents and adults. These skills are not only unique to emergency medicine but also relevant to home health care



physicians. Residents should focus on the initial evaluation and management of patients with minor injuries and problems related to other specialties that are closely related to home health care, such as gynecology. Residents should practice progressive responsibility, self-directed learning, and effective patient and family communication, including for those with multiple comorbidities.

### **Objectives:**

By the end of the training, trainees should develop competencies in managing the following domains:

- **Shock:**
  - Hypovolemic
  - Cardiogenic
  - Distributive
  - Obstructive
- **Cardiology:**
  - Myocardial infarction and its complications
  - Cardiac arrhythmias, conduction disturbances, and indications for pacemakers
  - Pulmonary embolism
  - Pulmonary edema (cardiogenic and non-cardiogenic)
  - Acute aortic and peripheral vascular disorders, including arteriovenous fistulae (optional)
  - Acute complications of cardiomyopathies and myocarditis
  - Thrombolytic therapy
  - Recognition, evaluation, and management of hypertensive emergencies
- **Respiratory Failure:**
  - Acute respiratory distress syndrome (ARDS)
  - Hypercapnic respiratory failure
  - Hypoxemic respiratory failure
  - Status asthmaticus
  - Aspiration and chemical pneumonitis
  - Bronchopulmonary infections
  - Upper airway obstructions
  - Oxygen therapy

- **Airway Maintenance:**
  - Emergency airway management
  - Endotracheal intubation
  - Tracheostomy
  - Long-term intubations versus tracheostomy.
- **Renal Disorders:**
  - Renal regulation of fluid balance and electrolytes
  - Acute acid-base disorders and their management
  - Renal failure (prerenal, renal, and postrenal)
  - Interpretation of urine electrolytes
  - Evaluation of oliguria
  - Drug dosing in renal failure
- **Neurology:**
  - Coma
  - Management of persistent vegetative states
  - Psychiatric emergencies
- **Infectious Diseases:**
  - Antimicrobial agents: aminoglycosides, antifungal agents, antituberculosis agents, penicillin and other antibiotics, antiviral agents, agents for parasitic infections
  - Infection control for special care units
  - Systemic sepsis
  - Hospital-acquired and opportunistic infections in critically ill patients
  - Adverse reactions to antimicrobial agents
  - Infectious risks to health care workers



- **Hematology:**
  - Acute defects in hemostasis: thrombocytopenia, disseminated intravascular coagulation, primary fibrinolytic therapy
  - Anticoagulation and fibrinolytic therapy
  - Sickle cell crisis
- **Gastroenterology:**
  - Acute pancreatitis with shock
  - GI bleeding
  - Hepatic failure
  - Toxic megacolon
- **Urology:**
  - Obstructive uropathy and acute urinary retention
  - Urinary tract bleeding
- **Preventive Care:**
  - Stress ulcer prophylaxis
  - Drug dosing in hepatic failure
- **Trauma Management:**
  - Initial approaches to trauma management.

### Procedural Skills:

Residents must be proficient in the following procedural skills to identify the indications, contraindications, complications, and pitfalls of these interventions:

- **Airway Management:**
  - Open airway maintenance in non-intubated, unconscious, paralyzed patients
  - Intubation (oral and nasotracheal)
  - Cricothyrotomy, transtracheal catheterization, and tracheostomy
- **Breathing and Ventilation:**
  - Ventilation with bag and mask
  - Positive end-expiratory pressure (PEEP)
  - Intermittent positive pressure breathing (IPPB)
  - Intermittent mandatory ventilation (IMV)
  - Continuous positive airway pressure (CPAP)

- Pressure support ventilation (PSV)
- Airway pressure release ventilation (APRV)
- Suction techniques
- Chest physiotherapy and incentive spirometry (optional)
- Management of pneumothorax (needle and chest tube insertion, drainage systems)
- Monitoring of airway pressures
- Interpretation of sputum cultures by smear
- Performance of bedside pulmonary function tests
- Application of appropriate oxygen therapy
- **Circulation:**
  - Arterial puncture and blood sampling
  - Insertion of monitoring lines
  - Obtaining 12-lead ECGs
  - Dynamic ECG interpretation
  - Cardioversion
- **GI Tract:**
  - Insertion of transesophageal devices
  - Prevention and management of upper GI bleeding
- **Hematology:**
  - Proper ordering and interpretation of coagulation studies
  - Sterility techniques and precautions
  - Sampling, staining, and interpretation of blood, sputum, urine, drainage, and other body fluids
  - Interpretation of antibiotic levels and sensitivities
- **Nutrition:**
  - Tube feeding
  - Parenteral nutrition
  - Monitoring and assessment of metabolism and nutrition
  - Maintenance of temperature homeostasis
- **Core Topics:**
  - Acute abdomen



- Cholelithiasis/cholecystitis
- Renal stones
- Fracture detection
- Acute gastroenteritis
- Electrolyte disturbances
- Dehydration
- Back pain
- Urinary tract infections (UTI)
- Ischemic heart disease (IHD)
- COPD exacerbation
- Asthma exacerbation
- Hypertensive emergencies
- Diabetic emergencies
- GI bleeding

### Rehabilitation Rotation

The resident will gain adequate exposure to many conditions observed and evaluated in a rehabilitation sitting. He/she will identify rehabilitation principles for patients with chronic and debilitating medical disorders.

#### Duration:

4 weeks

#### Activity types:

Rotation in outpatient and inpatient rehabilitation units based on hospital structure.

#### Objectives:

By the end of the rotation, the trainee must be able to attain the capacity to perform the following roles and possess the required knowledge and skills:

- Describe the relevant causes, mechanisms, and symptoms, as well as the classification and diagnosis of neurological disorders, musculoskeletal disorders, and generalized conditions. Additionally, describe the treatment options for these conditions.
- Explain when it is appropriate to use common interventions, as well as when they should be avoided, their effectiveness, and potential side-effects.

- Identify the roles of physical therapy techniques and assess how they can be applied to individual patients.
- Integrate relevant basic, clinical, and evidence-based information into patient care.
- Develop a suitable rehabilitation plan with realistic goals for each patient.
- Order appropriate tests and interpret the results based on the patients' symptoms.
- Manage chronic illnesses by providing well-structured, continuous, and evidence-based care to control symptoms, prevent complications, and improve quality of life.
- Conduct necessary procedures (both diagnostic and therapeutic) to address acute and/or chronic medical issues.

### 3.a. Knowledge:

- Describe the relevant etiology, pathophysiology, and presentation of the following categories of diseases:
  - Neurological disorders including multiple sclerosis, Parkinson's, Guillain–Barré syndrome (AIDP), chronic inflammatory demyelinating polyneuropathy (CIDP), and peripheral neuropathies.
    - Musculoskeletal disorders including arthritis and multiple traumas.
    - Generalized conditions including deconditioning, burns, and cancers.
- Describe the classification and diagnosis of the above disorders.
- Describe the principles of management of the above disorders, both pharmacologically and non-pharmacologically.
- Appraise the use of medications to treat the above disorders and select/prescribe appropriate drug therapy.
- Select, justify, and interpret appropriate investigation including lab tests, radiological workup, and electrodiagnostic and psychometric tests.
- Identify and prevent common complications such as depression, infections, venous thrombosis, contractures, and chronic pain.



- Identify the roles of physical modalities and assess their appropriate application to the individual patient.
- Identify, assess, and select appropriate use of orthoses and mobility aids.
- Identify and manage relevant medicolegal issues.

### 3.b. Skills:

- Perform a competent physical and functional examination of the patient, emphasizing the neuromusculoskeletal systems.
- Perform a functional independence measure (FIM) assessment for the patient.
- Order relevant investigations and interpret the results of such tests, including blood work, body fluid analysis, and imaging tests.
- Formulate an appropriate rehabilitation plan based on realistic goals for the individual patient.
- Perform diagnostic and therapeutic procedures, including joint aspiration and joint injection.

## Adult Endocrinology and Metabolism Rotation

### Duration:

4 weeks

### Description:

During endocrinology and metabolism rotations, residents must develop all CanMEDS core competencies while learning the basic skills required for the diagnosis and management of diverse endocrinological and metabolic conditions affecting adolescents and adults. Residents should focus on undifferentiated patient problems as well as those that emerged in previously diagnosed patients. Residents shall practice progressive responsibility and self-directedness in dealing with patients and their families and be able to act as primary care providers for patients with multiple comorbidities.

### Rotation setting:

- Outpatient and inpatient (consultation only)

## Objectives:

By the end of the rotation, the resident will be able to:

- Define all seven CanMEDS core competencies while learning the basic skills required for the diagnosis and management of diverse endocrinological and metabolic conditions affecting adolescents and adults.
- Develop a thorough understanding of relevant basic sciences including pathophysiology, drug therapy for diseases such as diabetes mellitus, hypothyroidism, and other common endocrine diseases.
- Obtain a comprehensive history and perform a complete physical examination of patients with endocrine symptoms or known endocrine or metabolic diseases and identify at-risk patients.
- Master the skills to select and interpret laboratory, imaging, and pathological studies (e.g., thyroid biopsy) used in the evaluation of endocrine and metabolic diseases appropriately.
- Formulate a problem list and develop a comprehensive treatment plan and assess patient response to therapy.
- Apply the knowledge to counsel patients concerning their diagnosis, planned diagnostic testing, and recommended therapies.
- Summarize approaches for the evaluation of common endocrine and metabolic presentations.
- Appraise literature pertinent to the evaluation of patients with endocrine and metabolic diseases.

## Covered Topics:

- Diabetes mellitus
- Hypercalcemia/Hypocalcemia
- Failure to thrive
- Endocrine neoplasm/paraneoplastic syndrome
- Osteoporosis
- Obesity
- Thyroid disease



### Procedures:

- Insulin therapy/continuous glucose monitoring
- Hypercalcemia management

## Adult Neurology Rotation

### Duration:

4 weeks

### Description:

Residents on rotation in neurology departments must develop all CanMEDS core competencies while learning the basic skills required for the diagnosis and management of varied neurological conditions in adults. Residents should focus on undifferentiated patient problems as well as those that emerged in previously diagnosed patients. Residents shall practice progressive responsibility and self-directedness in dealing with patients and their families, and be able to act as primary care providers for patients with multiple comorbidities.

### Rotation setting:

Outpatient and inpatient care

### Objectives:

By the end of the training, the resident will be able to:

- Define all seven CanMEDS core competencies while learning the basic skills required for the diagnosis and management of diverse neurological conditions affecting adolescents and adults
- Develop a thorough understanding of relevant basic sciences including pathophysiology, drug therapy for diseases such as acute stroke, seizure disorder, gait disorders, and peripheral neuropathy
- Obtain a comprehensive history including mental status and perform a complete neurological examination for patients with neurological symptoms or known neurological diseases and identify at-risk patients.
- Master the skills to select and interpret laboratory, imaging, and neurological studies (e.g., lumbar puncture) used in the evaluation of neurological diseases appropriately.
- Formulate a problem list and develop a comprehensive treatment plan and assess patient response to therapy.

- Apply the knowledge gained to counsel patients regarding their diagnosis, planned diagnostic testing, and recommended therapies.
- Summarize approaches for the evaluation of common neurological presentations.
- Critically appraise literature pertinent to the evaluation of patients with neurological diseases.

### Covered Topics:

- Convulsion disorders
- Dementia
- Delirium
- Headache (migraine, tension headache, etc.)
- Neurology neoplasm (glioblastoma multiform, etc.)
- Parkinson disease
- Stroke/TIA
- Spasticity

### Procedures:

- Basic physiotherapy
- Fall risk assessment
- Lumbar puncture

## Adult Pulmonology Rotation

### Duration:

4 weeks

### Description:

During adult pulmonary rotation, residents must develop all CanMEDS core competencies while learning the basic skills required for the diagnosis and management of diverse pulmonary conditions affecting adolescents and adults. Residents should focus on undifferentiated patient problems as well as those that emerged in previously diagnosed patients. Residents shall practice progressive responsibility and self-directedness in dealing with patients and their families, and be able to act as primary care providers for patients with multiple comorbidities.



### Rotation setting:

Outpatient and inpatient care

### Objectives:

By the end of the rotation, the resident will be able to:

- Acquire knowledge about epidemiology, genetics, natural history, and clinical expression of pulmonary disorders encountered in outpatient and inpatient settings.
- Obtain a comprehensive history and perform a complete physical examination of patients with respiratory symptoms or known pulmonary diseases and identify at-risk patients.
- Master the skills to select and interpret laboratory, imaging, and pathologic studies used in the evaluation of pulmonary diseases appropriately.
- Formulate a problem list and develop a comprehensive treatment plan and assess patient response to therapy.
- Apply the knowledge acquired to counsel patients regarding their diagnosis, planned diagnostic testing, and recommended therapies.
- Mastering the skills with competences in performing common procedures used in adult pulmonology service, including paracentesis and thoracentesis.
- Summarize approaches for the evaluation of common pulmonary disease presentations.
- Critically appraise literature pertinent to the evaluation of patients with pulmonary diseases.

### Covered Topics:

- Bronchial asthma/COPD
- Upper and lower respiratory tract infections (e.g., aspiration/community-acquired pneumonia/hospital-acquired pneumonia)
- Sleep disorders including OSA and insomnia
- Respiratory failure
- Tuberculosis
- Pulmonary embolism
- Pleural effusion and management

- Respiratory secretions
- Pulmonary neoplasm

#### **Procedures:**

- Care of patient on home ventilator
- Tracheostomy care
- Pleural tapping
- Chest physiotherapy
- Opioids management

### **Adult Cardiology Rotation**

#### **Duration:**

4 weeks

#### **Description:**

Residents during cardiology/coronary rotation must develop all CanMEDS core competencies while learning the basic skills required for the diagnosis and management of diverse cardiology conditions affecting adolescents and adults. Residents should focus on undifferentiated patient problems and those seen in previously diagnosed patients. Residents will practice progressive responsibility and self-directedness when dealing with patients, including those with multiple comorbidities and their families.

#### **Rotation setting:**

Outpatient and inpatient care

#### **Objectives:**

By the end of the rotation, the resident will be able to:

- Develop all seven CanMEDS core competencies while learning the basic skills required for the diagnosis and management of diverse cardiovascular conditions affecting adolescents and adults.
- Identify relevant basic sciences including pathophysiology, drug therapy, and microbial basis of cardiac diseases.
- Obtain a comprehensive history and perform a complete physical examination of patients with cardiac symptoms or known cardiac diseases and identify at-risk patients.



- Master the skills to select and interpret laboratory, imaging, and cardiac studies used in the evaluation of cardiac diseases appropriately.
- Formulate a problem list and develop a comprehensive treatment plan and assess patient response to therapy especially to chronic cardiac conditions such as chronic heart failure, chronic atrial fibrillation, and chronic valve diseases.
- Apply the skills to counsel patients concerning their diagnosis, planned diagnostic testing, and recommended therapies.
- Summarize approaches for the evaluation of common cardiac disease presentations.
- Critically appraise literature pertinent to the evaluation of patients with cardiac diseases.

### Covered Topics:

- Arrhythmia
- Cardiac tamponade
- Dyslipidemia
- Heart failure
- Ischemic heart disease (IHD)
- Pericarditis

### Procedures:

- ECG
- Echocardiogram

## Palliative Care Rotation

### Duration:

4 weeks

### Description:

Palliative care is mandatory core rotation for all residents. During this rotation, residents must develop all CanMEDS core competencies while acquiring the essential skills for managing diverse palliative care conditions. These skills are essential for providing high-quality care to patients with life-threatening illnesses and are relevant to home health care physicians. Residents focus on

understanding and addressing the physical, psychological, social, and spiritual needs of patients and their families.

### Objectives:

By the end of the rotation, trainees should be able to:

- **Social Attitudes:** Describe current societal attitudes about death and dying, including the impact of cultural, spiritual, and individual beliefs.
- **Define Palliative Care:** Define palliative care, its basic principles, and its role within the broader health care system.
- **Conduct Comprehensive Assessments:** Take a detailed palliative history and perform thorough physical examinations tailored to the needs of palliative care patients.
- **Cultural Competence:** Identify and address issues in death and dying that are relevant to different cultures, spiritual beliefs, and traditions, providing culturally sensitive care.
- **Holistic Care:** Identify and manage the physical, psychological, social, and spiritual issues faced by patients with life-threatening illnesses and their families.
- **Pain and Symptom Management:** Assess and classify pain accurately, identify the neurophysiology of pain, and apply pharmacological and non-pharmacological approaches to pain and symptom management.
- **Manage Physical Symptoms:** Appropriately manage common physical symptoms in palliative care, such as dyspnea, constipation, skin care, mouth care, terminal agitation, delirium, nausea, and vomiting.
- **Address Psychological Issues:** Identify psychological issues associated with life-threatening illness, including anxiety, depression, and anticipatory grief, and implement strategies to address them.
- **Nutrition and Feeding:** Assess and manage cachexia, nutrition, and feeding issues at the end of life, considering patient comfort and quality of life.
- **Grief and Bereavement:** Identify the process of normal grief and recognize atypical grief patterns, providing appropriate support to patients and families.



- **Interprofessional Collaboration:** Collaborate effectively with other health care professionals, recognizing when to seek consultations from experts in other fields.

### Core Topics:

- **Pain Management:**
  - Pharmacological treatments (opioids, NSAIDs, adjuvant medications)
  - Non-pharmacological treatments (physical therapy, psychological support)
  - Opioid titration and management of side-effects
- **Cancer Care:**
  - Managing symptoms related to malignancy and its treatment (chemotherapy, radiation)
  - Palliative care in advanced cancer
- **End-of-Life Issues:**
  - Conducting end-of-life conversations
  - Addressing patient and family concerns about dying and death
  - Legal and ethical considerations in end-of-life care
- **Opioid Infusion:**
  - Indications for opioid infusion
  - Techniques for administration
  - Monitoring and managing adverse effects
- **Advanced Care Planning:**
  - Engaging patients and families in discussions about goals of care
  - Documenting advanced directives and care preferences
- **Symptom Management:**
  - Dyspnea: Causes, assessment, and management strategies
  - Gastrointestinal symptoms: Managing constipation, nausea, and vomiting
  - Neurological symptoms: Managing agitation, delirium, and terminal restlessness
- **Psychosocial and Spiritual Support:**

- Providing holistic support addressing psychological, social, and spiritual needs
- Facilitating access to counseling and spiritual care services
- **Interdisciplinary Team Coordination:**
  - Effective communication and collaboration with an interdisciplinary team
  - Roles and contributions of various team members (nurses, social workers, chaplains)



### **Procedural Skills:**

Conducting comprehensive palliative assessments

- Pain management techniques, including opioid administration
- Symptom management strategies for common issues in palliative care
- Effective communication with patients and families about end-of-life issues
- Collaboration with interdisciplinary teams to provide holistic care

### **Intensive Care Unit Rotation**

#### **Duration:**

4 weeks

#### **Activities description:**

The intensive care rotation is intended to provide HHC residents with exposure to common acute and chronic conditions, and to be involved in decision-making processes regarding assessment, diagnosis, and management of patients in intensive care departments.

#### **Activity types:**

- Inpatient services in intensive care units

#### **Objectives:**

Residents must display their ability to effectively utilize medical knowledge and skills to provide patient-focused, safe, and high-quality care. They should also enhance their skills in advising and planning care for critically ill patients, while considering the patients' clinical condition, environment, cultural preferences, and available resources.

Residents should exhibit increased responsibility and self-directedness when engaging with patients and their families. They should also demonstrate effective collaboration with other critical care team members while caring for patients with complex conditions such as multiple comorbidities or organ failure in a multidisciplinary manner.

It is crucial for residents to make timely decisions and participate effectively in team-based care.

**By the end of this rotation, the resident will be able to:**

Describe the natural history and clinical expression of critical care illnesses encountered in the inpatient, ICU, and ER settings.

- Identify the pathophysiology of commonly observed diseases in critically ill patients.
- Demonstrate working knowledge of Critical Care Medicine by active participation in the management of critically ill patients.
- Comfortable in the management of cardiac arrest and the acute resuscitation of a traumatized or acutely ill patient.
- Effectively obtain relevant history and perform pertinent physical examinations of critically ill patients.
- Demonstrate competence in performing common procedures in medical and surgical ICUs, including central and arterial line insertions, orotracheal intubation, paracentesis, thoracentesis, and lumbar puncture.

Appropriate selection and interpretation of laboratory, imaging, and pathological findings in the evaluation of pulmonary disease

**Knowledge:**

- **By the end of the training in this rotation, the resident should develop competency in the management of the following domains :** (shocks, sepsis, heart failure, myocardial infarction, cardiac arrhythmia, pulmonary embolism, DVT, Pulmonary edema, cardiac tamponade, acute respiratory failure, status asthmatics, respiratory adequacy, oxygen therapy, stroke, status epilepticus, mechanical ventilation, renal regulation of fluid balance and electrolytes, renal failure, acute acid-base disorders, evaluation of oliguria, drug dosing in renal failure, acute pancreatitis, upper and lower GI bleeding, sickle cell crisis, pressure ulcers, delirium)

**Skills:**



- Pressure ulcer care
- Tracheotomy care
- Arterial blood sampling
- Foley catheter insertion
- NGT insertion and confirm position
- ACLS
- Parental nutrition

## Pediatric Intensive Care Rotation

### Duration:

4 weeks

### Activities description:

The goal of pediatric intensive care rotation is to provide HHC residents a concentrated focus on pediatric patients requiring critical care. After completing the rotation, residents will be able to identify, evaluate, and manage pediatric patients who have chronic illnesses and are rapidly deteriorating using a multi-system approach. They will also comprehend the fundamentals of stabilizing and transporting ill children.

### Activity types:

- Inpatient services: Pediatric intensive care units

## Objectives

Following this rotation, the trainee will be able to:

- Demonstrate knowledge of the fundamental anatomy, pathophysiology, and clinical symptoms of typical pediatric illnesses.
- Describe the appropriate uses, restrictions, efficacy, and potential adverse effects of common pediatric treatments.
- Utilize pertinent basic, clinical, and evidence-based data in providing care for pediatric patients.
- Recognize and address a declining pediatric patient promptly and seek appropriate assistance in a timely fashion.
- Administer immediate basic life support interventions for pediatric emergencies and collaborate efficiently in rapid response systems to enhance clinical outcomes and resource utilization.
- Execute essential pediatric procedures (both diagnostic and therapeutic) for acute issue management.
- Administer structured, evidence-based health care to control symptoms, prevent complications, and enhance quality of life in chronic pediatric illnesses.
- Explain fundamental principles of ventilation, fluid management, nutritional support, and neuroprotective measures in intensive care settings.
- Prepare for and initiate safe patient transport with proper handover procedures.
- Apply patient safety principles and measures when assessing and managing pediatric patients.
- Utilize early warning charts while acknowledging their limitations.
- Understand the legal implications of malpractice and negligence, and demonstrate knowledge of common legal practices in medicine.

## Knowledge:

At the end of rotation , the resident shall master to describe the relevant etiology, pathophysiology, and presentation of : (acute respiratory distress syndrome, bronchiolitis, pneumonia, neuromuscular weakness, sickle cell



acute chest syndrome, status asthmatics, shocks all types, cardiorespiratory arrest, congenital heart disease, seizures and status epilepticus, meningitis and encephalitis, spinal muscular atrophy, Guillain–Barré syndrome , fluids and electrolytes disturbances, acute kidney injury, electrolytes disturbance, gastrointestinal bleeding, diabetic ketoacidosis, diabetes insipidus, airway management, mechanical ventilation, palliative care, UTI)

### **Skills:**

- The management of pressure ulcers, tracheotomy care, collection of arterial blood samples, pediatric advanced life support (PALS), placement of a Foley catheter, and insertion of a nasogastric tube with verification of proper positioning.

### **Elective and Selective Rotations**

The HHC Diploma curriculum provides several opportunities to develop trainees' competencies through elective rotations, which are distributed in Years 1 and 2. The HHC Diploma curriculum stresses elective rotation to give trainees the chance to select clinical rotations that might not be taken in the program or to choose clinical rotations in which they need further training.

The candidate will choose a specialty of his/her interest and set an objective.

1. Pain management
2. Geriatric medicine
3. Ophthalmology
4. ENT
5. Dermatology
6. Radiology
7. Others

## VIII. CONTINUUM OF LEARNING

This includes the learning that should take place at each key stage of progression within home health care. Trainees should have the ability to perform lifelong Continuous Professional Development (CPD). Trainees should keep in mind the necessity of CPD for every health care provider in order to meet the demands of their vital professions. The following table shows how this role is progressively expected to develop throughout the junior, senior, and consultant levels of practice.

*For Home Health Care Diploma Program:*



D1 (Junior Level)	D2 (Senior Level)	Registrar
Dependent/supervised practice	Dependent/supervised practice For all (D2) Rotation except Home Health Care Rotation Independent/supervised practice For Home Health Rotation (D2) ONLY	Independent practice/provide supervision
Obtain fundamental knowledge related to core clinical problems of the specialty	Apply knowledge to provide appropriate clinical care related to core clinical problems of the specialty	Acquire advanced and up-to-date knowledge related to core clinical problems of the specialty
Apply clinical skills such as physical examination and practical procedures related to the core presenting problems and procedures of the specialty	Analyze and interpret the findings from clinical skills to develop appropriate differential diagnoses and management plan for the patient	Compare and evaluate challenging, contradictory findings and develop expanded differential diagnoses and management plan

# IX. TEACHING METHODS:

## Program-Specific Learning Activities:

### A) Program Academic Half-Day:

The academic half-day consists of several types of sessions scheduled by the chief resident and program director based on previous years' feedback from residents and includes the following:

- Emergency lectures
- Communication skills
- Demonstration and practice of procedures
- Clinical problem solving
- Medical research and statistics

This is protected teaching time and attendance is mandatory for all HHC residents. The activities are conducted weekly between 1:00 pm and 4:00 pm.

#### **Emergency and nonemergency topics lectures**

Lectures concerning emergency and non-emergency conditions are prepared and presented by a senior staff member. This series of topics is repeated annually to ensure adequate attainment.

#### **The objectives of these sessions are as follows:**

Review common emergency and nonemergency situations with respect to diagnosis and management



## Approaches to common conditions and symptoms

These are lecture series concerning systematic approaches to common medical conditions, with symptoms prepared and presented by a junior resident during academic half-days under the supervision of a specialized senior staff member. These series are repeated annually.

The objectives of this activity are as follows:

- Demonstrate diagnostic and therapeutic skills
- Access and apply relevant information to clinical practice
- Practice contemporary, evidence-based, and cost-effective medicine
- Avoid unnecessary or harmful investigations or management

## Clinical skills

Most clinical skills sessions are conducted at the bedside in hospitals or at home. This includes history-taking, physical examinations, and communication skills. However, lectures and video demonstrations can be added to half-day academic activities prior to bedside practice.

**The objectives of the clinical skills session are as follows:**

- Recognize the many facets of the doctor–patient relationship and be able to apply a biopsychosocial model to issues in health and medicine
- Master basic interview and communication skills and demonstrate competence in advanced interview and communication skills
- Master basic physical examination skills and be able to perform and interpret focused examinations of the cardiovascular, pulmonary, musculoskeletal, and neurological systems; breasts; and genitalia in men and women
- Exhibit professional behaviors including the demonstration of respect for patients, colleagues, faculty members, and others in all settings
- Help residents to pass clinical exams

## Communication skills (Table 1)

Competencies in this role are essential for establishing rapport and trust, formulating diagnoses, delivering information, striving for mutual understanding, and facilitating a shared care plan. Poor communication can lead to undesirable outcomes, and effective communication is critical for optimal patient outcomes. Physicians enable patient-centered therapeutic communication through decision-making and effective dynamic interactions

with patients, families, caregivers, fellow professionals, and other important individuals.

A series of communication skills lectures concerning common situations are regularly delivered by experienced staff members during academic half-days and repeated annually.

### **Medical ethics (Table 2)**

Ethical issues are frequently encountered in clinical practice, and discussing the medicolegal aspects of care with experts is of paramount importance for improved and safer training and practice. A senior staff member raises a particular medicolegal issue to be discussed interactively with residents during academic half-days.

#### **The objectives of this activity are as follows:**

- Recognize the humanistic and ethical aspects of a career in medicine
- Examine and affirm personal professional moral commitments
- Equip residents with a foundation of philosophical, social, and legal knowledge
- Apply knowledge that has been gained in clinical reasoning and provide residents with the skills required to apply this insight, knowledge, and reasoning to clinical care

### **Data interpretation**

A full range of laboratory data encountered during daily practice (e.g., blood tests, electrocardiograms [ECGs], and photographs) are presented during the academic half days. A case-based approach is used to assist trainees in digesting and understanding the plethora of investigations with which they should be familiar. All residents were expected to actively participate in the activity.

#### **The objectives of the activity are as follows:**

- Gain knowledge of the various investigational tools used in HHC
- Enhance proper interpretation of different investigational data
- Enhance proper use of investigational tools
- Discuss the advantages and limitations of various investigational tool

### **Research and evidence-based practice (Table 3)**

The Saudi Commission for Health Specialties promotes and supports research conducted by trainees. Therefore, residents are expected to participate in



annual research projects. The presentation and dissemination of the work produced occur during formal resident research days held annually at various centers.

These projects are not necessarily required to result in publications, or national or international presentations. However, outstanding projects and interested residents are supported and mentored if presentations or publications are appropriate.

**The objectives of the research aspect of the HHC program are as follows:**

- Become familiar with the generation and dissemination of research via oral presentations, poster presentations, and abstract preparation and attend core academic teaching applicable to research including ethics, study design, abstract writing, and presentation skills
- Gain competence in conducting literature reviews, data synthesis and analysis, and interpretation

## Example of the academic half-day table as shown in Appendix E

### Core Specialty Topics in Home Health Care

1. Acute abdomen
2. Acute gastroenteritis
3. Anemia
4. Anxiety disorders
5. Arthritis
6. Arrhythmia
7. Ascites
8. Back pain
9. Bronchial asthma/COPD
10. Cholelithiasis/cholecystitis
11. Common infectious diseases: brucellosis/influenza/dengue fever/viral hepatitis
12. Conjunctivitis (allergic, infective)
13. Convulsion disorders
14. COPD
15. Dehydration
16. Dementia
17. Depression
18. Dermatitis (atopic, contact)
19. Diabetes mellitus
20. Domestic violence (child abuse, spouse abuse, older adult abuse)
21. Dyslipidemia
22. Electrolyte disturbances
23. Enuresis
24. Failure to thrive
25. Fracture of bones
26. Gastro esophageal reflex disorders (GERD)



27. Gastritis and peptic ulcer diseases
28. Headache (migraine, tension headache, etc.)
29. Heart failure
30. Hypertension
31. Hyperplasia of prostate
32. Irritable bowel syndrome (IBS)
33. Ischemic heart disease (IHD)
34. Injuries (bed sores, wounds, lacerations, MSS, etc.)
35. Incontinence
36. Malignancy
37. Osteoarthritis (OA)
38. Osteoporosis/rickets/vitamin D deficiencies
39. Obesity
40. Pain management
41. Parkinson disease
42. Sleep disorders including OSA and Insomnia
43. Stroke/TIA
44. Respiratory failure
45. Renal failure
46. Tuberculosis
47. Thyroid disease
48. Upper and lower respiratory tract infections
49. UTI /renal stone
50. Venous embolism and coagulation disorders

### **Procedures**

1. Corneal foreign body removal
2. Demonstrate peak flow measurement and inhaler techniques
3. Ear wax removal
4. Excision of in-growing nails

5. Incision and drainage of superficial abscesses.
6. Intramuscular, intravenous, subcutaneous, and intra-dermal injection
7. Obtaining an arterial blood gas
8. Perform swabs (throat, eye, ear, wound, vaginal, urethral, etc.)
9. Performing an ECG
10. Peripheral intravenous line, adult and child
11. Removal of foreign body from nose and external ear
12. Scraping for mycology
13. Skills of BLS, ACLS, and ATLS
14. Skin biopsy and excision of skin lesions
15. Soft tissue injections (e.g., planter fasciitis)
16. Splinting and techniques of immobilization of sprained joints and fractures
17. Suturing and laceration repair and suture removal
18. Urine dipstick and microscopy
19. Wound care: debridement, suturing, repair, and dressing
20. Ethics in home health care
21. Care of patient in home ventilator
22. Tracheostomy care
23. Basic physiotherapy
24. Palliative care
25. INR mentoring
26. Ascetic tapping
27. Pleural tapping
28. Drainage of minor abscess
29. Opioid infusion
30. Insulin therapy, continuous glucose monitoring

### **List of behavioral/communication skills**

31. Conveying bad news
32. Discussion of prognosis and prognostication



33. Discussion of end-of-life issues
34. Advanced care planning and decision making
35. Conducting and leading family meetings
36. Interdisciplinary team coordination and support.

### **Workshops and simulation-based activities:**

1. Suturing.
2. Ventilator management and tracheostomy care.
3. Wound assessment and management.
4. List the predisposing risk factors to pressure injury.
5. Explain preventive measures of pressure injury.
6. Management of pressure injury.
7. List factors that enhance wound healing.
8. Risk factors predisposing to diabetic foot.
9. Management of diabetic foot.
10. Modalities of wound dressing.
11. Foley-catheter insertion and possible difficulties with it.
12. Enteral feeding (naso-gastric tube, percutaneous endoscopic gastrostomy (PEG), jejunostomy).
13. Colostomy bag and colostomy care

## **B) Practice-Based Learning:**

### **1. Bed side-based learning**

This involved conducting teaching sessions for small resident groups involved in patient care focusing on documenting differential diagnoses, reviewing medical reports, developing management plans, and communicating with patients and their families.

### **2. On-call duty-based learning:**

Residents are required to undertake on-call duty shifts, including taking comprehensive histories, performing physical examinations, discussing management plans with seniors, and performing the necessary procedures for diagnosis and management.

### 3. Clinic-based learning (CBL):

Residents work under supervision to obtain medical histories, perform physical examinations, present clinical findings, discuss differential diagnoses, and develop communication skills.

### 4. Self-directed learning:

Residents work on personal learning goals, maintain personal portfolios, engage in auditing and research projects, read journals, and attend training programs.

### C) Morning report:

Daily reports educate resident physicians, monitor patient care, review management decisions and outcomes and explore case presentations and learning formats.

## See Appendix C for Universal Topics

Example table for Universal Topics distributed over training years

Training Year	Modules		Topics name	
	Number	Name	Number	Name
D1	Module-1	Introduction	Topic-1	Safe drug prescribing
	Module-3	Diabetes and Metabolic Disorders	Topic-11	Recognition and management of diabetic emergencies
	Module-3	Diabetes and Metabolic Disorders	Topic-13	Comorbidities of obesity
D2	Module-1	Introduction	Topic-5	Blood transfusion

### 1.1. General Learning Opportunities:

#### A. Morbidity and mortality conferences

The program director and department chairperson assign the task of conducting mortality and morbidity conferences to a group of trainees. These conferences are held every 4–8 weeks and focus on improving patient care, preventing errors, and identifying areas for improvement. The presentations are kept confidential by law.



## **B. Grand rounds/guest speaker lectures**

The events are presented by experienced senior staff members from different disciplines on a weekly basis. The topics will be selected from core curriculum knowledge. The objectives of the grand rounds are to increase physicians' medical knowledge and skills, apply current practice guidelines in the field of HHC, describe the latest advances and research, and identify areas of controversy.

## **C. Case presentation**

Case presentations are conducted weekly by a resident under senior supervision, focusing on interesting cases. The objectives include presenting comprehensive patient histories, formulating differential diagnoses, developing treatment plans, and seeking regular feedback to improve presentation skills.

## **D. Journal clubs, critical appraisal, and evidence-based medicine**

The journal club meets every 4 weeks. The chief resident or program director selects a new article from a reputable journal and shares it with a senior resident for at least 2 weeks before the meeting. The club aims to promote professional development, keep up with the current literature, foster discussions on good practice, ensure evidence-based practice, develop critical appraisal skills, and provide enjoyable educational and social opportunities.

# X. ASSESSMENT AND EVALUATION

## 1. Purpose of Assessment

Assessments play a vital role in the success of postgraduate training. Assessment guides trainees and trainers to achieve defined standards, learning outcomes, and competencies. However, assessments provide feedback to learners and faculty regarding curriculum development and implementation, teaching methods, and the quality of the learning environment. A reliable and valid assessment is essential for curriculum alignment with respect to objectives, learning methods, and assessment tools. Finally, the assessment assures patients and the public that health professionals are safe and competent to practice.

Trainee assessments during the diploma aim to:

- Improve learning by providing formative assessments, allowing residents to receive instant feedback, and identifying areas for improvement.
- Provide reliable summative evidence that residents achieve curriculum standards during training programs.
- Evaluate the workplace performance of residents.
- Ensure that residents have the necessary basic knowledge, skills, and attitudes.

The residents' evaluations and assessments throughout the program are conducted in accordance with the Saudi Commission's training, examination rules, and regulations. It includes two main categories: Formative and Summative.

## 2. Formative Assessment

### 2.1 General Principles

Formative assessment aims to actively support trainees' growth by guiding learning, verifying progression, and ensuring that they acquire competencies essential for high-quality professional practice across all health disciplines.



Enhance learning by offering trainees opportunities to practice, receive immediate feedback, measure their performance, and identify areas for further development and improvement.

Drive learning and optimize the training process by clarifying the expectations of trainees and motivating them to actively pursue suitable training and experience.

It provides robust and comprehensive evidence that trainees are progressing toward fulfilling curriculum standards throughout the training program.

Ensure that trainees acquire the required competencies across all domains of effective health care practices.

This confirms that trainees possess the essential foundational knowledge, skills, and professional attitudes required for their specialties.

Confirm that trainees are advancing appropriately in their performance relative to their training stage.

Trainees, as adult learners, should actively seek feedback and use it to develop their performance throughout their journey from “novice” to “mastery” levels of competence. Formative assessment (also referred to as continuous or ongoing assessment) is a component of assessment deliberately distributed across the academic year to provide trainees with timely, meaningful, and actionable feedback that drives learning and improvement.

Specified time should be allocated for trainees to meet with their program director or to review performance reports and logs (e.g., ITER, logbook, and workplace-based assessment tools). Trainees are expected to assume ownership of their development through self-directed learning. The input from the formative assessment tools is integrated at the end of the year to inform decisions on whether individual trainees will advance to the next training level. The formative assessment instruments are periodically reviewed and updated as needed to ensure alignment with the SCFHS guidelines and standards.

Consistent with best practices in health profession education, formative assessment will have the following features tailored to the targeted competencies:

- a. Multisource: Select all appropriate tools, including relevant workplace-based assessments, according to competency, training level, and rotation.
- b. Comprehensive: covers all learning domains (i.e., knowledge, skills, and attitude—professional behavior).
- c. Relevant: focused on workplace-based observations for performance in authentic practice settings.
- d. Milestone-oriented competency: This reflects trainees' expected competencies that match their developmental level.

## 2.2 Formative Assessment Tools

Note: Home Health Care Formative Assessment tools for the academic year can be updated annually



## Formative Assessment

Gen./Sub.	Level	Knowledge					Skills							Attitude	
		SOE	EYP T-n't	Academic Activities	CB D	EYPT - Local	OSCE/OSPE	Research	DOPS	Log book	Volunteering	Other	Mini-CEX	ITERS	
Home Health Care Physicians	D1	✓		✓			✓		✓					✓	✓
	D2	✓		✓			✓		✓					✓	✓

## Description Table of Formative Assessment Tools

Learning Domains	Assessment/Educational Activity Tool	Requirements
Knowledge	Academic Activities	Trainees must attend the academic activities as scheduled. Any excused absentee must be approved by the program director.
	SOE	The trainee is required to participate and complete the SOE once yearly. The SOE stations/cases to be provided by the Scientific Council or as directed by them. Results provided will be for formative feedback purposes and improvement.
Skills	OSCE	The trainee is required to participate and complete the OSCE/OSPE once yearly. The OSCE/OSPE stations/cases to be provided by the Scientific Council or as directed by them. Results provided will be for formative feedback purposes and improvement.
	DOPS	D1: all trainees are required to do at least 10 DOPS per academic/year. Feedback will be given for formative assessment. D2: all trainees are required to do at least 12 DOPS per academic/year. Feedback will be given for formative assessment.

Learning Domains	Assessment/Educational Activity Tool	Requirements
	Mini-CEX	D1: all trainees are required to do at least 17 Mini-CEX per academic/year. Feedback will be given for formative assessment. D2: all trainees are required to do at least 16 Mini-CEX per academic/year. Feedback will be given for formative assessment.
Attitude	ITER	D1& D2: At the end of each rotation trainees are required to have their ITERS completed and submitted according to their rotation schedules in the curriculum. Scoring is according to SCFHS criteria.

*SOE: Structured Oral Exam EYPT-n't: International Exam EYPT-Local: Progress Test*

*DOPS: Direct observation of procedural Skills OSCE: Objective Structured Clinical Examination CBD: Case-based Discussion*

*OSPE: Objective Structured Practical Examination Mini-CEX: Mini-Clinical Evaluation Exercise ITER: In-Training Evaluation Report*

### **Important Notes:**

All formative and work-based assessments should be performed according to the SCHFS definitions and methodologies. Not complying with these parameters will result in trainees facing disciplinary actions per the SCFHS bylaws.



The evaluation of each component will be based on the following equation according to the resident's performance:

Percentage	<50%	≥50–69.99%	<70–89.99%	≥90%
Description	Does not meet the expectations	Borderline performance	Meet the expectations	Exceed the expectations

## 2.3 Annual ITER (A-ITER)

The A-ITER is an assessment procedure meant to capture trainee performance over the entire academic year. (A-ITER = ITER1 + ITER2+ITER3+ ...).

### Annual ITER Outcome (D1):

- Satisfactory performance: promotion to D2 level.
- Not fully satisfactory performance: conditional promotion with remediation plan.
- Non-satisfactory performance: No promotion and remediation plan.

## 3. Summative Assessment

### 3.1 General Principles

Summative assessment is a component that primarily aims to make informed decisions about trainees' competency. Unlike formative assessment, summative assessment does not aim to provide constructive feedback. For further details, please refer to the General Bylaws of Training in Postgraduate Programs and General Assessment Bylaws (available online: [www.scfhs.org](http://www.scfhs.org)). In order to be eligible to sit for the final exams, trainees will be granted "Certification of Training Completion" upon successful completion of all training rotations.

### 3.2. Final In-Training Evaluation Report (FITER)

- To provide a comprehensive review of the trainee's annual performance.
- To determine the trainee's readiness and eligibility to sit for the final diploma examination
- $FITER = AITER1 + AITER2$

### 3.3 Completion of Training (COT) Certificate

To be eligible to sit for the final examination, each trainee is required to obtain a “Completion of training (COT) certificate.” Based on the training bylaws and executive policy (please refer to [www.scfhs.org](http://www.scfhs.org)) trainees will be granted “COT certificate” according to the FITER outcome:

- Completion of training: Trainee eligible to obtain COT certificate.
- Training is partially complete: COT certificate is granted after completing the missing requirements (< 12 weeks).
- Training is in-complete: Trainee must repeat the final year with a remediation plan.

The “COT certificate” will be issued and approved by the supervisory committee or its equivalent according to the SCFHS policies.

### 3.4 Final Diploma Examination

The final diploma is a summative assessment component that grants trainees a specialty certification. It has two elements:

- a) Final written exam: to be eligible for this exam, trainees are required to have obtained a “COT certificate”.

This examination assesses the trainee’s theoretical knowledge base (including recent advances) and problem-solving capabilities in home health care. It is delivered in the MCQ format and held at least once per year. The number of examination items, eligibility, and passing scores are established in accordance with the commission’s training and examination rules and regulations. Examination details and a blueprint have been published on the Commission website [www.scfhs.org.sa](http://www.scfhs.org.sa).

#### Blueprint Outlines:

No.	Sections	Percentage
1	Home health care	10%
2	Internal medicine and chronic care	20%
3	Wound care	5%
4	Adult cardiology/coronary care	10%

5	Critical care	5%
6	Palliative care	10%
7	Medical and surgical emergencies (adult & pediatrics)	10%
8	Neurology	5%
9	Geriatrics	15%
10	General pediatrics	5%
11	Psychiatry	5%
Total		100%

### Notes:

- Blueprint distributions of the examination may differ up to +/-5% in each category.
  - Percentages and content are subject to change at any time.
  - The content of the following table is for demonstration only, please refer to the most updated version published on the SCFHS website.
- a) **Final clinical/practical exam:** Trainees will be required to pass the final written exam in order to be eligible to sit for the final clinical/practical exam.

This examination assesses diverse high-level clinical skills, including data gathering, reasoning and analysis, decision-making, and professional attitudes.

The examination shall consist of four graded stations, each with (10) minute encounters, with 1–2 examiners at each station. The four stations consisted of (four) Structured Oral Exam (SOE) stations, and all stations shall be designed to assess integrated clinical/practical encounters. Domains and sections may overlap and more than one category can be evaluated within a station. Each station can address one or more cases or scenarios. The SOE stations are designed using preset questions and ideal answers.

The examination will cover some or more of the sections of blueprint mentioned above.

Eligibility and passing scores are established in accordance with the commission's training, and examination rules and regulations. Examination details and a blueprint have been published on the commission website: [www.scfhs.org.sa](http://www.scfhs.org.sa).

**Note:** Content is subject to change at any time. See the SCFHS website for the updated information.

d) **Certification:** Candidates passing all components of the final specialty examination are awarded the certificate of "Saudi Diploma of Home Health Care for physicians"

For further details on the final exams, please refer to the General Bylaws of Training in Postgraduate Programs and General Assessment Bylaws (available online: [www.scfhs.org](http://www.scfhs.org)).



# XI. PROGRAM AND COURSE EVALUATION

The SCFHS applies various measures to evaluate the implementation of this curriculum. The training outcomes of this program will undergo the quality assurance framework endorsed by the Central Training Committee at the SCFHS. Trainee assessment (both formative and summative) results will be analyzed and mapped to the curriculum content. Other indicators that will be incorporated are as follows:

- Report of the annual trainees' satisfaction survey.
- Reports from trainees' evaluation of faculty members.
- Reports from trainees' evaluation of rotations.
- Reports from the annual survey of program directors.
- Data available from program accreditations.
- Reports from direct field communications with trainees and trainers.

Goal-Based Evaluation: The achievement of intended milestones will be evaluated at the end of each stage to assess the progress of curriculum delivery, and any deficiencies will be addressed in the following stage, utilizing the time devoted to trainee-selected topics and professional sessions.

In addition to subject-matter opinions and best practices from benchmarked international programs, the SCFHS will apply a robust method to ensure that this curriculum will utilize all data available during its revision in the future.

## XII. POLICIES AND PROCEDURES

This curriculum represents the means and materials, and outlines the learning objectives with which trainees and trainers will interact to achieve the identified educational outcomes. The SCFHS has a full set of “General Bylaws of Training in Postgraduate Programs” and “Executive Policies” (published on the official SCFHS website) that regulate all training-related processes. The general bylaws of training, assessment, and accreditation as well as executive policies on admission, registration, formative assessment and promotion, examination, trainees’ representation and support, duty hours, and leaves are examples of regulations that need to be implemented. Under this curriculum, trainees, trainers, and supervisors must comply with the most updated bylaws and policies, which can be accessed online (through the official SCFHS website)



# XIII. APPENDICES

- A. Universal Topics Modules
- B. Examples of an Academic Half-Day Table
- C. References



# Appendix A

## Universal Topics

### Intent:

These are high-value interdisciplinary topics of the utmost importance to trainees. The reason for delivering the topics centrally is to ensure that every trainee received high-quality teaching and develops essential core knowledge. These topics are common across all specialties.

Topics included here meet one or more of the following criteria:

- Impactful: these are topics that are common or life-threatening
- Interdisciplinary: hence topics that are difficult to teach by a single discipline
- Orphan: topics that are poorly represented in the undergraduate curriculum
- Practical: topics that trainees will encounter in hospital practice

### Development and Delivery:

The core topics for the PG curriculum will be centrally developed and delivered by the commission through an e-learning platform. A set of preliminary learning outcomes for each topic will be developed. In collaboration with the central team, content experts may modify the learning outcomes.

These topics will be didactic in nature, with a focus on the practical aspects of care. These topics are more content-intensive than workshops or other planned face-to-face interactive sessions.

The suggested duration of each topic is 1.30 h.



### Assessment:

The topics are delivered in a modular manner. At the end of each Learning Unit, an online formative assessment will be conducted. After completing all topics, there will be a combined summative assessment in the form of a context-rich MCQ. All trainees must attain a minimum competency in the summative assessment. Alternatively, these topics can be assessed in a summative manner along with specialty examinations.

Some ideas may include case studies, high-quality images, worked examples of prescribing drugs in disease states, and Internet resources.

## Module 1: Introduction

1. Safe drug prescribing
2. Hospital acquired infections
3. Sepsis; SIRS; DIVC
4. Antibiotic stewardship
5. Blood transfusion

**Safe drug prescribing:** At the end of the Learning Unit, you should be able to:

- a) Recognize importance of safe drug prescribing in the health care
- b) Describe the various Adverse Drug Reactions with examples of commonly prescribed drugs that can cause such reactions
- c) Apply principles of drug-drug interactions, drug-disease interactions, and drug-food interactions into common situations
- d) Apply principles of prescribing drugs in special situations such as renal failure and liver failure
- e) Apply principles of prescribing drugs for older adults and pediatric age group patients, and for pregnancy and lactation
- f) Promote evidence-based cost-effective prescribing
- g) Discuss ethical and legal framework governing safe-drug prescribing in Saudi Arabia

### Hospital Acquired Infections (HAI):

At the end of the Learning Unit, you should be able to

- a) Discuss the epidemiology of HAI with special reference to HAI in Saudi Arabia
- b) Recognize HAI as one of the major emerging threats in health care
- c) Identify the common sources and set-ups of HAI
- d) Describe the risk factors of common HAIs such as ventilator associated pneumonia, MRSA, CLABSI, vancomycin resistant enterococcus (VRE)
- e) Identify the role of health care workers in the prevention of HAI
- f) Determine appropriate pharmacological (e.g., selected antibiotic) and non-pharmacological (e.g., removal of indwelling catheter) measures in the treatment of HAI
- g) Propose a plan to prevent HAI in the workplace

Sepsis, SIRS, and DIVC: At the end of the Learning Unit, you should be able to

- a) Explain the pathogenesis of sepsis, SIRS, and DIVC
- b) Identify patient-related and non-patient related predisposing factors of sepsis, SIRS, and DIVC
- c) Recognize a patient at risk of developing sepsis, SIRS, and DIVC
- d) Describe the complications of sepsis, SIRS, and DIVC
- e) Apply the principles of management of patients with sepsis, SIRS, and DIVC
- f) Describe the prognosis of sepsis, SIRS, and DIVC

### **Antibiotic Stewardship:**

At the end of the Learning Unit, you should be able to:

- a) Recognize antibiotic resistance as one of the most pressing public health threats globally
- b) Describe the mechanism of antibiotic resistance
- c) Determine the appropriate and inappropriate use of antibiotics
- d) Develop a plan for safe and proper antibiotic usage plan including right indications, duration, types of antibiotics, and discontinuation.
- e) Appraise of the local guidelines in the prevention of antibiotic resistance

### **Blood Transfusion:**

At the end of the Learning Unit, you should be able to:

- a) Review the different components of blood products available for transfusion
- b) Recognize the indications and contraindications of blood product transfusion
- c) Discuss the benefits, risks, and alternative to transfusion
- d) Undertake consent for specific blood product transfusion
- e) Perform steps necessary for safe transfusion
- f) Develop understanding of special precautions and procedures necessary during massive transfusions

Recognize transfusion associated reactions and provide immediate management

## Module 2: Cancer

6. Principles of management of cancer
7. Side-effects of chemotherapy and radiation therapy
8. Oncologic emergencies
9. Cancer prevention
10. Surveillance Follow-up of cancer patients

### Principles of Management of Cancer:

At the end of the Learning Unit, you should be able to:

- a) Discuss the basic principles of staging and grading of cancers
- b) Enumerate the basic principles, (e.g., indications, mechanism, types) of
  - a. Cancer surgery
  - b. Chemotherapy
  - c. Radiotherapy
  - d. Immunotherapy
  - e. Hormone therapy

### Side-Effects of Chemotherapy and Radiation

Therapy: At the end of the Learning Unit, you should be able to:

- a) Describe important side-effects (e.g., frequent or life or organ threatening) of common chemotherapy drugs

- b) Explain principles of monitoring of side-effects in a patient undergoing chemotherapy
- c) Describe measures (pharmacological and non-pharmacological) available to ameliorate side-effects of commonly prescribed chemotherapy drugs
- d) Describe important (e.g., common and life-threatening) side-effects of radiation therapy
- e) Describe measures (pharmacological and non-pharmacological) available to ameliorate side-effects of radiotherapy

### **Oncologic Emergencies:**

At the end of the Learning Unit, you should be able to:

- a) Enumerate important oncologic emergencies encountered both in hospital and ambulatory settings
- b) Discuss the pathogenesis of important oncologic emergencies
- c) Recognize the oncologic emergencies
- d) Institute immediate measures when treating a patient with oncologic emergencies
- e) Counsel the patients in anticipatory manner to recognize and prevent oncologic emergencies

### **Cancer Prevention:**

At the end of Learning Unit, you should be able to:

- a) Conclude that many major cancers are preventable
- b) Identify smoking prevention and life-style modifications are major preventable measures
- c) Recognize cancers that are preventable
- d) Discuss the major cancer prevention strategies at the individual as well as national level
- e) Counsel patients and families in proactive manner regarding cancer prevention including screening

### **Surveillance and Follow-Up of Cancer Patients:**

At the end of the Learning Unit, you should be able to:

- a) Describe the principles of surveillance and follow-up of patients with cancers



- b) Enumerate the surveillance and follow-up plan for common forms of cancer
- c) Describe the role of primary care physicians, family physicians, and similar others in the surveillance and follow-up of cancer patients
- d) Liaise with oncologists to provide surveillance and follow-up for patients with cancer

## Module 3: Diabetes and Metabolic Disorders

11. Recognition and management of diabetic emergencies

12. Management of diabetic complications

13. Comorbidities of obesity

14. Abnormal ECG

### Recognition and Management of Diabetic Emergencies:

At the end of the Learning Unit, you should be able to:

- a) Describe pathogenesis of common diabetic emergencies including their complications
- b) Identify risk factors and groups of patients vulnerable to such emergencies
- c) Recognize a patient presenting with diabetic emergencies
- d) Institute immediate management
- e) Refer the patient to appropriate next level of care
- f) Counsel patient and families to prevent such emergencies

### Management of Diabetic Complications:

At the end of the Learning Unit, you should be able to:

- a) Describe the pathogenesis of important complications of Type 2 diabetes mellitus
- b) Screen patients for such complications
- c) Provide preventive measures for such complications
- d) Treat such complications
- e) Counsel patients and families with special emphasis on prevention

### Comorbidities of Obesity:

At the end of the Learning Unit, you should be able to:

- a) Screen patients for presence of common and important comorbidities of obesity
- b) Manage obesity related comorbidities
- c) Provide dietary and life-style advice for prevention and management of obesity

### **Abnormal ECG:**

At the end of the Learning Unit, you should be able to:

- a) Recognize common and important ECG abnormalities
- b) Institute immediate management, if necessary

## **Module 4: Medical and Surgical Emergencies**

- 15. Management of acute chest pain
- 16. Management of acute breathlessness
- 17. Management of altered sensorium
- 18. Management of hypotension and hypertension
- 19. Management of upper GI bleeding
- 20. Management of lower GI bleeding

For all the above; following learning outcomes apply.

At the end of the Learning Unit, you should be able to:

- c) Triage and categorize patients
- d) Identify patients who need prompt medical and surgical attention
- e) Generate preliminary diagnoses based history and physical examination
- f) Order and interpret urgent investigations
- g) Provide appropriate immediate management to patients
- h) Refer the patients to next level of care, if needed

## **Module 5: Acute Care**

- 21. Pre-operative assessment
- 22. Post-operative care
- 23. Acute pain management



- 24. Chronic pain management
- 25. Management of fluid in the hospitalized patient
- 26. Management of electrolyte imbalances

### **Pre-Operative Assessment:**

At the end of the Learning Unit, you should be able to:

- a) Describe the basic principles of pre-operative assessment
- b) Perform pre-operative assessment in uncomplicated patient with special emphasis on
  - i. General health assessment
  - ii. Cardiorespiratory assessment
  - iii. Medications and medical device assessment
  - iv. Drug allergy
  - v. Pain relief needs
- c) Categorize patients according to risks

### **Post-Operative Care:**

At the end of the Learning Unit, you should be able to:

- d) Devise a post-operative care plan including monitoring of vitals, pain management, fluid management, medications, and laboratory investigations
- e) Hand-over the patients properly to appropriate facilities
- f) Describe the process of post-operative recovery in a patient
- g) Identify common post-operative complications
- h) Monitor patients for possible post-operative complications
- i) Institute immediate management for post-operative complications

### **Acute Pain Management:**

At the end of the Learning Unit, you should be able to:

- a) Review the physiological basis of pain perception
- b) Proactively identify patients who might be in acute pain
- c) Assess a patient with acute pain

- d) Apply various pharmacological and non-pharmacological modalities available for acute pain management
- e) Provide adequate pain relief for uncomplicated patients with acute pain
- f) Identify and refer patients with acute pain who can be benefitted from specialized pain services

### **Chronic Pain Management:**

At the end of the Learning Unit, you should be able to:

- g) Review bio-psychosocial and physiological basis of chronic pain perception
- h) Discuss various pharmacological and non-pharmacological options available for chronic pain management
- i) Provide adequate pain relief for uncomplicated patients with chronic pain
- j) Identify and refer patients with chronic pain who can be benefitted from specialized pain services

### **Management of Fluid in Hospitalized Patients:**

At the end of the Learning Unit, you should be able to:

- k) Review physiological basis of water balance in the body
- l) Assess a patient for his/her hydration status
- m) Recognize a patient with over and under hydration
- n) Order fluid therapy (oral as well as intravenous) for a hospitalized patient
- o) Monitor fluid status and response to therapy through history, physical examination and selected laboratory investigations

### **Management of Acid-Base Electrolyte Imbalances:**

At the end of the Learning Unit, you should be able to:

- a) Review physiological basis of electrolyte and acid-base balance in the body
- b) Identify diseases and conditions that are likely to cause or associated with acid/base and electrolyte imbalances
- c) Correct electrolyte and acid-base imbalances
- d) Perform careful calculations, checks, and other safety measures while correcting acid-base and electrolyte imbalances
- e) Monitor response to therapy through history, physical examination and selected laboratory investigations



## Module 6: Frail Older Adults

- 27. Assessment of frail older adults
- 28. Mini-mental state examination
- 29. Prescribing drugs for older adults
- 30. Care of older adults

### Assessment of Frail Older Adults:

At the of the Learning Unit, you should be able to

- f) Enumerate the differences and similarities between comprehensive assessment for older adults and other patients
- g) Perform comprehensive assessment, in conjunction with other members of health care team, of frail older adults with special emphasis on social factors, functional status, quality of life, diet and nutrition, and medication history
- h) Develop a problem list based on the assessment of older adults

### Mini-Mental State Examination:

At the end of the Learning Unit, you should be able to:

- a) Review the appropriate usages, advantages, and potential pitfalls of Mini-MSE
- b) Identify patients suitable for mini-MSE
- c) Screen patients for cognitive impairment through mini-MSE

### Prescribing Drugs in for Older Adults:

At the end of the Learning Unit, you should be able to:

- d) Discuss the principles of prescribing for older adults
- e) Recognize poly-pharmacy, prescribing cascade, inappropriate dosages, inappropriate drugs, and deliberate drug exclusion as major causes of morbidity in older adults
- f) Describe the physiological and functional declines in older adults that contribute to increased drug-related adverse events
- g) Discuss drug-drug interactions and drug-disease interactions among older adults
- h) Familiar with Beers criteria

- i) Develop rational prescribing habit for older adults
- j) Counsel older patients and their families on safe medication usage

### **Care of Older Adults:**

At end of the Learning Unit, you should be able to

- a) Describe the factors that need to be considered while planning care for older adults
- b) Recognize the needs and well-being of caregivers
- c) Identify the local and community resources available in the care of older adults
- d) Develop, with inputs from other health care professionals, individualized care plans for older patients

## **Module 7: Ethics and Health Care**

31. Occupational hazards of HCW

32. Evidence-based approach to smoking cessation

33. Patient advocacy

34. Ethical issues: transplantation/organ harvesting; withdrawal of care

35. Ethical issues: treatment refusal; patient autonomy

36. Role of doctors in death and dying

### **Occupation Hazards of Health Care Workers (HCW):**

At the end of the Learning Unit, you should be able to:

- e) Recognize common sources and risk factors of occupational hazards among the HCW
- f) Describe common occupational hazards in the workplace
- g) Develop familiarity with legal and regulatory frameworks governing occupational hazards among the HCW
- h) Develop a proactive attitude to promote workplace safety
- i) Protect yourself and colleagues against potential occupational hazards in the workplace

### **Evidence-Based Approach to Smoking Cessation:**

At the end of the Learning Unit, you should be able to:



- j) Describe the epidemiology of smoking and tobacco usages in Saudi Arabia
- k) Review the effects of smoking on the smoker and family members
- l) Effectively use pharmacologic and non-pharmacologic measures to treat tobacco usage and dependence
- m) Effectively use pharmacologic and non-pharmacologic measures to treat tobacco usage and dependence among special population groups such as pregnant women, adolescents, and patients with psychiatric disorders

**Patient Advocacy: At the end of the Learning Unit,**

You should be able to:

- a) Define patient advocacy
- b) Recognize patient advocacy as a core value governing medical practice
- c) Describe the role of patient advocates in the care of the patients
- d) Develop a positive attitude towards patient advocacy
- e) Be a patient advocate in conflicting situations
- f) Be familiar with local and national patient advocacy groups

**Ethical issues: transplantation/organ harvesting; withdrawal of care:**

At the end of the Learning Unit, you should be able to:

- a) Apply key ethical and religious principles governing organ transplantation and withdrawal of care
- b) Be familiar with the legal and regulatory guidelines regarding organ transplantation and withdrawal of care
- c) Counsel patients and families in the light of applicable ethical and religious principles
- d) Guide patients and families to make informed decision

**Ethical issues: treatment refusal; patient autonomy:**

At the end of the Learning Unit, you should be able to:

- e) Predict situations where a patient or family is likely to decline prescribed treatment
- f) Describe the concept of “rational adult” in the context of patient autonomy and treatment refusal
- g) Analyze key ethical, moral, and regulatory dilemmas in treatment refusal

- h) Recognize the importance of patient autonomy in the decision-making process
- i) Counsel patients and families declining medical treatment in the light of best interest of patients

### **Role of Doctors in Death and Dying:**

At the end of the Learning Unit, you should be able to:

- a) Recognize the important role a doctor can play during a dying process
- b) Provide emotional as well as physical care to a dying patient and family
- c) Provide appropriate pain management in a dying patient
- d) Identify suitable patients and refer to patient to palliative care services



## Appendix-B

The following is a table with example topics that illustrate the half-day activities as they span over the course of one year (or a cycle of teaching if more than one year is required to cover all topics).

Repeating sessions and topics in every training year is discouraged. Each half-day is ideally dedicated to one theme.

<i>Academic week</i>	<i>Section</i>	<i>Date</i>	<i>Time</i>	<i>Sessions</i>	<i>presenters</i>
1	Fundamentals in surgery	Oct-5	13:00-14:00	Welcoming to the program	Program director
			14:00-15:00	Case-based study**	A
			15:00-16:00	Topic 2	B
2		Oct-12	13:00-14:00	Topic 3	C
			14:00-15:00	Case-based study	D
			15:00-16:00	Topic 5	E
3		Oct- 19	13:00-14:00	Topic 6	F
			14:00-15:00	Case-based study	B
			15:00-16:00	Topic 8	C
4		Oct- 26	13:00-14:00	Journal club*	K
			14:00-15:00	Case-based study	B
			15:00-16:00	Topic 10	A

\* Journal clubs could be held in the evening or during the half-day.

\*\* Case-based study could be done in the evening or during the half-day.

## Appendix-C

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