



Dubai Academic Health Corporation Medical Internship Program Curriculum

1) Background

The Medical Internship Curriculum aims to guide the intern through the transformative journey from a medical student to a fully competent and compassionate physician and facilitate this process through a comprehensive and structured guidance.

The curriculum aligns with the National Institute of Health Specialties competencies and builds on the framework of medical competencies from medical school. It promotes autonomy, alongside the appropriate supervision. You will be given the opportunity to make decisions and carry out patient care, all under the vigilant guidance of experienced professionals who will be readily available for support and mentorship

2) Core Competencies

Keeping in alignment with the National Institute of Health Subspecialties of the UAE, the medical internship program incorporates six main core competencies as the main part of the curriculum and assessment of the medical intern. Those competencies are designed to enhance patient care and improve the quality and safety of the health care system.

A. Professionalism

Interns must demonstrate a commitment to professionalism and an adherence to ethical principles, and must demonstrate competence in:

- compassion, integrity, and respect for others.
- responsiveness to patient needs that supersedes self-interest.
- respect for patient privacy and autonomy.
- accountability to patients, society, and the profession.
- respect and responsiveness to diverse patient populations, including but not limited to diversity in gender, age, culture, race, religion, disabilities, national origin, socioeconomic status, and sexual orientation.
- ability to recognize and develop a plan for one's own professional well-being.
- appropriately disclosing and addressing conflict or duality of interest.

B. Patient Care and Procedural Skills

Interns must be able to provide patient care that is appropriate, and effective for the treatment or health problems and the promotion of health, and must demonstrate competence in:

- obtaining a comprehensive medical history.
- performing a comprehensive physical examination.
- assessing a patient's problems and/or chief complaint.
- appropriately using diagnostic studies and tests.
- integrating information to develop a differential diagnosis.
- developing and implementing a treatment plan.
- Interns must be able to perform all medical, diagnostic, and surgical procedures considered essential for the area of practice.

C. Medical Knowledge

Interns must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social behavioral sciences, as well as the application of this knowledge to patient care.

D. Practice-based Learning and Improvement

Interns must demonstrate the ability to investigate and evaluate their care of patients, applying scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning, and must demonstrate competence in:

- identifying strengths, deficiencies, and limits in one's knowledge and expertise.
- setting learning and improvement goals.
- identifying and performing appropriate learning activities.
- systematically analyzing practice using quality improvement methods and implementing changes with the goal of practice improvement.
- incorporating feedback and formative evaluation into daily practice.
- locating, appraising, and assimilating evidence from scientific studies related to their patients' health problems.
- using information technology to optimize learning.

E. Interpersonal and Communication Skills

Interns must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals, and must demonstrate competence in:

- communicating effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds.
- communicating effectively with physicians, other health professionals and health-related agencies.
- working effectively as a member of a health care team or other professional group.

- educating patients, families, students, and other health professionals.
- acting in a consultative role to other physicians and health professionals;
 - maintaining comprehensive, timely, and legible medical records, if applicable.

F. Systems-based Practice

Interns must demonstrate an awareness of and responsiveness to the larger context and system of health care, including the social determinants of health, as well as the ability to call effectively on other resources to provide optimal health care, and must demonstrate competence in:

- working effectively in various health care delivery settings and systems relevant to their clinical specialty.
- coordinating patient care within the health care system as relevant to their role.
- advocating for quality patient care and optimal patient care systems.
- working in interprofessional teams to enhance patient safety and improve patient care quality.
- participating in identifying system errors and implementing potential systems solutions.
- incorporating considerations of cost awareness and risk benefit analysis in patient and/or population-based care as appropriate.

3) Core Rotation Specialty Objectives and Didactics

The specific objectives for each core rotation have been developed to supplement the core competencies. These objectives that interns will gain the particular skills and knowledge they need to master during the rotation.

A. Internal Medicine Rotation Objectives

- Conduct initial patient evaluation upon admission, including taking a comprehensive history-taking and a pertinent physical examination that are documented properly in the EMR.
- Formulate a rational differential diagnosis and implement relevant diagnostic evaluations.
- Determine a provisional diagnosis and propose an associated management strategy.
- Possess the ability to impart medical knowledge to patients, fostering an understanding of their medical conditions and actively involving them in the management of chronic ailments, such as diabetes, hypertension, and bronchial asthma.
- Display competency in performing specific diagnostic and therapeutic procedures (enumerated subsequently as procedural skills).
- Exhibit the capacity to address acute medical crises under professional guidance, sharing associated duties and responsibilities within the healthcare team.
- Write prompt and accurate follow up notes as well as relevant discharge summaries and assigned letters.
- Be motivated to work as part of a team and establish productive and harmonious relationships with all colleagues within the team and other health care professionals.

Procedural Competencies

- Cardio-pulmonary resuscitation (as part of the team)
- Securing the airway
- Cardiac defibrillation
- Blood sampling
- Carrying out and interpreting an ECG
- Basic X ray interpretation
- Pleural tap and aspiration
- Ascitic tap and drainage.
- Lumbar puncture

Didactic Sessions:

Week 1

- Management of Common Cardiovascular and Respiratory Disorders
- Hematology for the Internist
- Acid/Base
- Syncope

Week 2

- Endocrinology in Internal Medicine:
- Gastrointestinal Disorders and their Management
- Rheumatology essentials and emergencies

Week 3

- Journal Club with residents
- Case Presentations
- Liver disease
- Antibiotic Stewardship

Week 4

- Nephrology Essentials
- Board Review Questions
- Case Presentations by interns

B. Surgery Rotation Objectives

- Conduct initial patient evaluation upon admission to the surgical unit, including taking a comprehensive history-taking and a pertinent physical examination that are documented properly in the EMR.
- Formulate a rational differential diagnosis and implement relevant diagnostic evaluations.
- Determine a provisional diagnosis and propose an associated management strategy.
- When necessary, describe the pre-operative preparation of patients for surgical operations.
- Assist in the pre-and post-operative management of surgical patients.
- Provide primary treatment of trauma wounds and undertake suturing of wounds and the removal of sutures.

- Manage acute surgical problems under supervision, sharing in the concerned duties and responsibilities.
- Write prompt and accurate follow up notes in time.
- Write relevant discharge summaries and letters, medical reports, and death certificates.
- Communicate effectively with patients and their relatives and win their confidence.
- Establish productive and harmonious relationships with colleagues on the unit and other health care professionals.

Procedural Competencies

- Examination of post-operative wounds
- Cardiopulmonary resuscitation - part of the team
- Collection of specimens for lab investigations
- Insertion of Foley's catheter, NGT, ABG
- Assisting in minor and major operations
- Suturing skills

Didactic Sessions

Week 1-4

Academic day with residents
Case discussions
Suturing skills workshop
Problem based discussion.

C. Pediatrics Rotation Objectives

- Conduct a focused patient interview from the patient or guardian to obtain a relevant pediatric history
- Perform an accurate and appropriate physical examination of children, including neonates.
- Formulate a prioritized and comprehensive problem plan, including a clinical diagnosis
- Describe pertinent testing, conduct common bedside investigative procedures and interpret common laboratory investigations.
- Outline plans of management for common pediatric problems
- Record the information collected and management plans in the form of an organized medical record.
- Describe normal growth and development during fetal life, the neonatal period, childhood and adolescence and rehabilitation of common pediatric disorders and emergencies.
- Advise patients and their guardians on preventive strategies for common infectious disorders, malnutrition, genetic and metabolic disorders, poisoning, accidents and child abuse.
- Be familiar with the national immunization program.

Procedural Competencies:

- Taking anthropometric measurements
- Venous access
- urinary catheterization
- Resuscitation as part of the team

Didactic Sessions:

Week 1

- Child Development and Behavior
- Pediatric Immunization Schedule and Its Importance
- Pediatric Nutrition and Growth

Week 2

- Approach to Genetic Disorders in Pediatrics
- Pediatric Endocrinology
- Pediatric Cardiology Essentials.
- Pediatric Respiratory Disorders

Week 3

- Neonatology Essentials
- Pediatric Neurology
- Pediatric Nephrology:
- Ethics in Pediatric Medicine
- Interpersonal Skills and Communication in Pediatrics:

Week 4

- Case Presentation and evaluations

D. Obstetrics and Gynecology Rotation Objectives:

- Take a relevant history and perform a basic physical examination in relation to obstetric & gynecological complaints;
- Perform a pelvic examination;
- Record the data obtained through history and physical examination in an accepted format.
- Develop a plan of initial management of the patient, including appropriate investigations;
- Recognize abnormalities of labor and be familiar with their management;

- Diagnose and provide the initial management of common obstetric & gynecological conditions;
- Assist in common obstetric & gynecological operations and common gynecological procedures;
- State the principles of preoperative and post-operative care;
- Outline the management of common medical disorders during pregnancy (e.g. diabetes, hypertension, UTI);
- Provide antenatal care to low-risk pregnant patients and manage common antenatal complaints;
- State the management of patients after normal delivery and Caesarian section and undertake the management of the puerperium and deal with puerperal complications;
- Function as a member of the team in providing care in obstetric emergency situations;
- Engage in medical practice, considering the ethical and medico-legal aspects of obstetrics and gynecology.

Procedural Competencies

- Collection of cervical smears
- Conduct normal deliveries
- Application of fetal electrodes
- PAP smears and swabs

Didactic Sessions:

Week 1

- Amenorrhea
- Early pregnancy
- Hyper emesis
- Hands on scan training

Week 2

- Academic day with residents
- Acute abdomen in pregnancy
- Post-Operative care during pregnancy.
- Menorrhagia.
- Hands on Family planning.

Week 3

- Prenatal Screening
- Scan in early pregnancy
- Abnormal U/S finding in early pregnancy.
- Hands on normal delivery.

Week 4 •

- Preterm labor
- Pre-eclampsia/eclampsia

- Early Labor
- Hands on CTG.

E. Primary Health Care Rotation Objectives

- Identify specific health risks for each age group (child, adolescent, adults, male and female) and perform necessary screening and counselling.
- Manage chronic health problems like diabetes, hypertension and bronchial asthma and identify high-risk patients and refer to secondary care as needed.
- Identify and treat common health problems in Primary care.
- Manage and refer acute emergencies presenting to the Primary Health Care clinic.
- Prescribe medications for different health problems using evidence-based practices.
- Conduct premarital counselling, applying policies and practices employed in the UAE.
- Counselling on family planning.
- Provide antenatal care and postnatal care for low-risk patients.
- Participate in home visits when available.

Procedural Competencies:

- Insert an IV line.
- IM and SC injections.
- Infiltration of local anesthesia
- Laceration repair and gluing
- ECG –recording and interpretation of common conditions.
- Take swab (throat, vaginal, urethral).
- Pap Smear
- Removal of foreign body
- Release of subungual hematoma

Didactic Sessions:

Week 1

- Case-Based Learning: Chronic disease management
- Journal Club
- Oral Case Presentation by the intern
- Board Review Questions

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Week 2

- Case-Based Learning: Disease screening
- Journal Club
- Oral Case Presentation by the intern
- Board Review Questions

Week 3

- Case-Based Learning: Chronic disease management
- Journal Club
- Oral Case Presentation by the intern
- Board Review Questions

Week 4

- Case-Based Learning: Disease screening
- Journal Club
- Oral Case Presentation by the intern
- Board Review Questions

F. Psychiatry Rotation Objectives

- Perform complete or directed psychiatric-focused histories and mental status examinations when appropriate
- Acquire and apply evidence-based knowledge about psychiatry-specific conditions and diseases
- Demonstrate effective interpersonal communications skills with patients and as a member of the healthcare team
- Communicate and Collaborate with team members
- Contribute information effectively to the team in a clear and timely manner
- Advocate on behalf of patients.

Didactic Sessions:

Week 1

- Psychiatric Interview and Mental Status Examination
- Psychopathology and DSM-5
- Psychopharmacology

Week 2

- Multidisciplinary conference (between psychiatry department and Emirates society of mental health).

Week 3

- Journal or evidence-based reviews articles During the academic day of the residents

Week 4

- Case-based planned didactic experiences
- During their rotation, each intern to present and discuss with psychiatrist 3 case studies

Emergency Medicine Rotation Objectives

- Perform a thorough, yet targeted history and physical examination on the emergency patient resulting in a prioritized assessment of the immediately acute and potentially life-threatening problems for the patient.
- Develop an initial plan for the stabilization and workup of acute problems, including laboratory and imaging examinations, as well as obtaining input from the appropriate consulting services.
- Interpret laboratory and imaging studies in a timely manner.

- Assist in developing a plan for appropriate disposition of patients to various settings including creation of clear and complete discharge instructions.
- Select appropriate pharmaceutical agents based upon relevant considerations.
- Progress to the management of multiple patients simultaneously, demonstrating effective task-switching.
- Function comfortably as a member of the entire ED team

Procedural Competencies:

- Assist in Adult medical resuscitation
 - Assist in Adult trauma resuscitation
- Diagnostic procedures
- Arthrocentesis
 - Nasogastric intubation
 - Thoracentesis
 - Paracentesis
 - Splinting and immobilization of extremity injuries and non-displaced fractures

Didactic Sessions:

Week 1

- Acute Cardiovascular Emergencies:
- Acute Respiratory Emergencies
- Management of Neurological Emergencies
- Case Presentation by interns and discussion

Week 2

- Trauma management skills : Airway - O2 delivery devices, airways adjuncts (OPA/ NPA) head-tilt chin lift, jaw-thrust, how to use a BVM, intubation, LMA and bougie use (+ NIV discussion),
- C-collar and logrolling
- Suturing
- Cardiac pacing, IO access, CPR, AED use, Defib use, how to cardiovert

Week 3

- Toxicology and Overdose Management
- Surgery / Trauma combined series
- Ortho/Surg teams in ED

Week 4

- Communication Skills and Dealing with Difficult Situations.

- Wellness and Burnout in Emergency Medicine
- Career Guidance in Emergency Medicine

4) Simulation Based Education

Interns will engage in two full days of simulation-based education at the MBRU simulation center during their medical internship year where they will be able to manage challenging patient scenarios without putting actual patients at risk. In addition , scenarios will address human factors such as communication, teamwork, and decision-making—that are integral to patient care.

Scenarios

- Polytrauma scenario
- Circulatory shock
- Chest pain and acute pulmonary edema (requiring noninvasive ventilation)
- Anaphylaxis - pediatrics
- Acute asthma attack - pediatric
- Post-partum hemorrhage

Skills stations

- Airway
- EFAST
- Urinary Catheterization and NG tube insertion
- IV cannula insertion, Blood draw

5) Research

Interns will engage in 4 weeks of research training and research application during their medical internship year. During the rotation the interns will be able to

- Learn the basics of clinical research through attending an academic day on the same held by the research training team.
- Master the processes of properly obtaining various types of consents and practicing good clinical practice (GCP) in an acute care setting.
- Ask meaningful questions to stimulate interns to utilize learning resources to create a differential diagnosis, a diagnostic algorithm, and treatment plan
- Challenge the evidence that the interns use to reach their medical decisions so that they understand the benefits and limits of the medical literature
- Attend a workshop on introductions to the basics of clinical research

- Work with other interns on a research project throughout the year and be assigned a mentor for supervision and work with the biostatistician on their project
- Produce a progress report every 2 months on their chosen research topic.
- Present the research topic prior to end of internship. When appropriate, dissemination of scholarly learning in a peer-reviewed manner (publication or presentation)

6) Other Courses and Workshops

In addition to the above Core Rotations, Medical Interns will receive and engage in workshops on **Wellbeing and Professionalism** during the introductory course as well as throughout the year of their medical internship. There will also be a **Career Fair day** and **Career Guidance Info Sessions** during the medical internship year to introduce the different local and international residency and non-clinical pathways.

7) Block Diagram of Medical Internship

Medical Internship Program Block Schedule													
	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8	Block 9	Block 10	Block 11	Block 12	Block 13
Name of Rotation	IM	Peds	Research	Elective	Ob/Gyn	EM	IM	Peds	Primary Care	Psych	Elective /Vacation	Elective	Surg
Sites	Site 1 Site 2	Site 4	Site 7	Site 1	Site 2 Site 3	Site 1	Site 1 Site 2	Site 4	Site 5	Site 1 Site 6	Site 2	Site 3	Site 1
% Inpatient	90%	90%	0	50%	90%	100%	90%	90%	100%	50%	100%	50%	90%
% Outpatient	10%	10%	0	50%	10%	0	10%	10%	0	50%	0	50%	10%
Research	Continuous longitudinal curriculum												
Simulation	Two day Course (Repeated 4 times per year)												
Sites	Site 1: Rashid Hospital		Site 2: Dubai Hospital			Site 3: Latifa Hospital			Site 4: Al Jalila Children's Hospital				
	Site 5: Primary Care Centers		Site 6: Al Amal Hospital			Site 7: Med Ed Bldg							

References

National Institute of Health Subspecialties
 EmiratesMEDs
 QF-Emirates (Qualifications Framework)