



Qatar University
College of Pharmacy
Advanced Clinical Internship
EMERGENCY MEDICINE

DESCRIPTION

Emergency medicine is an advanced clinical internship is a rotation in the Doctor of Pharmacy (PharmD) degree program focusing on the management of patients admitted to the emergency department for urgent care. During this internship, the PharmD student will be an active part of the interprofessional emergency medicine team responsible for collaborative care of these critically and non-critically ill patients. The PharmD student will have opportunity to integrate with the health care team and provide pharmaceutical care to assigned patients. During this internship, the PharmD student will be exposed to the institutional management of a broad spectrum of patient who are ill seeking urgent care that will help to enhance their therapeutic knowledge and clinical expertise.

GOALS

The goal of the Qatar University Doctor of Pharmacy (PharmD) degree program is to graduate medication therapy experts. To achieve this goal, this internship will provide the opportunity to integrate knowledge, skills and attitudes from seven educational outcomes:

1. **Care Provider** The PharmD student will use their knowledge, skills and professional judgment to provide pharmaceutical care and to facilitate management of patient's medication and overall health needs.
2. **Communicator:** The PharmD student will communicate with diverse audiences, using a variety of strategies that take into account the situation, intended outcomes of the communication and the target audience.
3. **Collaborator:** The PharmD student will work collaboratively with teams to provide effective, quality health care and to fulfill their professional obligations to the community and society at large.
4. **Manager:** The PharmD student will use their management skills in daily practice to optimize care of patients, to ensure the safe and effective distribution of medications, and to make efficient use of health resources.
5. **Advocate:** The PharmD student will use their expertise and influence to advance the health and well-being of individual patients, communities, and populations, and to support pharmacist's professional roles
6. **Scholar:** The PharmD student will possess and apply core knowledge and skills required to be a medication therapy expert, and are able to master, generate, interpret, and disseminate pharmaceutical and pharmacy practice knowledge.
7. **Professional:** The PharmD student will honour their roles as self-regulated professionals through both individual patient care and fulfillment of their professional obligations to the profession, the community, and society at large.

These educational outcomes will be achieved at a level of performance that is higher than a BSc (Pharm) graduate^{1,2,3}:

OBJECTIVES

Upon completion of this 4-week internship, the PharmD student will:

1. Demonstrate the ability to obtain a complete medication history making use of all available and appropriate resources, including the patient, medical record, family members, physician and other members of the health care team;
2. Demonstrate the ability to evaluate the appropriateness of a patient's drug therapy through literature review, patient interviews, physical examination, retrieval of necessary information from the health record, interpretation of laboratory studies and diagnostic investigations, and discussion with other health care professionals;
3. Demonstrate the proficiency in practicing with the pharmaceutical care model, including the ability to:
 - i. Identify and state actual or potential drug-related problems (DRP);
 - ii. Describe desired therapeutic outcomes;
 - iii. Compile a list of therapeutic alternatives;
 - iv. Choose and justify patient-specific therapy recommendations;
 - v. Develop and execute a monitoring plan for efficacy and safety;
4. Demonstrate the ability to efficiently, accurately, and completely document patient-related concerns, progress, and recommendations in a health record;
5. Demonstrate the ability to provide clinically useful therapeutic information to health professionals;
6. Demonstrate the ability to discuss and therapeutic controversies with the preceptor and other members of the health care team. The framework for the discussions will be knowledge of relevant evidence, critical appraisal of evidence, and appropriate application of evidence to the care of specific patients;
7. Identify and report a suspected adverse drug reaction (where applicable);
8. Demonstrate the ability to access and use available clinical resources effectively;
9. Demonstrate competence in discussing the pathophysiology, clinical features, and therapeutics (in detail, including therapeutic controversies) of the following disease states/processes:
 - i. Cardiac emergencies and exacerbations (e.g. aortic dissection, ACS, HF, arrhythmias)
 - ii. Dermatologic emergencies (e.g. SJS, TEN);
 - iii. Endocrine and Metabolic disorders (e.g. DKA, thyroid, acid-base disturbances, gout);
 - iv. Environmental Emergencies (e.g. CO exposure, drowning, electrical injury);
 - v. Bioterrorism/Mass Casualty;
 - vi. Gastrointestinal ailments (e.g. appendicitis, GI bleeding, pancreatitis, liver disease);
 - vii. Renal disorders (e.g. ARF, dialysis emergencies);
 - viii. Mental health (e.g. agitation and psychosis management);
 - ix. Pain management;
 - x. Respiratory emergencies (e.g. asthma, COPD);
 - xi. Infectious diseases;
 - xii. Neurologic conditions (e.g. migraine, seizure);
 - xiii. Trauma
 - xiv. Others that are prevalent at the internship site and as assigned by the preceptor
10. Demonstrate the ability to work effectively in an interprofessional environment towards the delivery of collaborative care.

PERSONAL OBJECTIVES

The PharmD student will identify at least 3 of their own objectives for the internship based upon their personally determined learning needs. These will be assessed (student self-reflection and preceptor feedback) at evaluation points during the internship.

REQUIRED ACTIVITIES

During this 4-week advanced clinical internship, the PharmD student will:

1. Provide pharmaceutical care to the patients in the patient care area as per the objectives stated above. This involves daily patient evaluation for efficacy and toxicity of existing therapy as well as detecting and resolving new potential DRPs;
2. Attend any interprofessional patient care rounds when they occur and assist in the initiation and continuation of appropriate therapy;
3. Provide medication counseling and perform medication histories on all patients under her care when appropriate;
4. Provide discharge counseling to all patients who require it and liaise with community practitioners whenever potentially beneficial;
5. Attend departmental education sessions whenever feasible;
6. Prepare two topics per week for discussion with preceptor. These can include specific rotation topics as well as topics selected by the preceptor;
7. Meet daily with preceptor to discuss patients being followed, issues of interest, therapeutic controversies, ongoing evaluation, specific topics;
8. Prepare and conduct one journal club for the pharmacy department. If two students are sharing the rotation, they are expected to jointly prepare and deliver the journal club (not each make 1 separate);
9. Prepare and conduct one presentation. This could be a patient case presentation to the pharmacy department or an in-service to nursing staff, physicians, or other allied health care members. If two students are sharing the rotation, they are expected to jointly make the presentation (not each make 1 separate);
10. Any other activity as pre-approved by preceptor and the QU PharmD Program Director.

POLICIES, PROCEDURES AND RESPONSIBILITIES

During the 4-week advanced clinical internship, the PharmD student will comply with the internship policies and procedures, and the student responsibilities as outlined on the program website at www.qu.edu.qa/pharmacy.

During the 4-week advanced clinical internship, the preceptor will comply with the internship policies and procedures as outlined at www.qu.edu.qa/pharmacy.

GENERAL REFERENCES

1. Association of Faculties of Pharmacy of Canada. Educational Outcomes for First Professional Degree Programs in Pharmacy (Entry-to Practice Pharmacy Programs) in Canada. 2014.
2. Association of Faculties of Pharmacy of Canada. Educational Outcomes for a Post-Baccalaureate Doctor of Pharmacy Graduate in Canada. June 12, 1999.
3. Association of Faculties of Pharmacy of Canada. Addendum C to CCAPP 2006 Standards. Post-baccalaureate Doctor of Pharmacy Degree Additional Accreditation Standards and Guideline Requirements.