



UAEU

جامعة الإمارات العربية المتحدة  
United Arab Emirates University

# NATIONAL INSTITUTE FOR HEALTH SPECIALTIES

## **NIHS Program Requirements for Specialty Training & Education in Clinical Pharmacy (Emirati Board in Clinical Pharmacy)**

*The Emirati Board in Clinical pharmacy is expected to define its specific program aims consistent with the overall mission of its Sponsoring Institution, the needs of the community it serves and that its graduates will serve, and the distinctive capabilities of pharmacists it intends to graduate. The Program must demonstrate substantial compliance with the Common and specialty-specific Program Requirements.*

*Where applicable, text in italics describes the underlying philosophy of the requirements in that section. These philosophic statements are not program requirements and are therefore not citable.*

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## **Introduction**

### **Int. A. Preamble**

Graduate Pharmacy Education is an important step of professional development between pharmacy school and independent practice. It is in this vital phase of the continuum of professional education that residents learn to provide best patient care under the supervision of faculty members who not only instruct, but also serve as role models of excellence, compassion, professionalism, and scholarship.

Graduate Pharmacy Education transforms pharmacy graduates into pharmacy scholars who care for the patient, family, and a diverse community; create and integrate new knowledge into practice; and educate future generations of pharmacists to serve the public.

Graduate Pharmacy Education has as a core tenet the graded authority and responsibility for patient care. The care of patients is undertaken with appropriate faculty supervision and conditional independence, allowing residents to attain the knowledge, skills, attitudes, and empathy required for independent practice. Graduate Pharmacy Education develops pharmacists who focus on excellence in delivery of safe, equitable, affordable, quality care; and the health of the populations they serve.

Graduate Pharmacy Education occurs in clinical settings that establish the foundation for practice-based and lifelong learning.

The professional development of the pharmacists continues through faculty modeling of the effacement of self-interest in a humanistic environment that emphasizes joy in curiosity, problem-solving, academic rigor, and discovery and occurs in a variety of clinical learning environments committed to Graduate Pharmacy Education and the well-being of patients, other residents and fellows, faculty members and all members of the health care team.

### **Int. B. Definition of Specialty**

Clinical Pharmacy is a health science discipline in which pharmacists provide patient care that optimizes medication therapy and promotes health, wellness, and disease prevention. As a discipline, clinical pharmacy also has an obligation to contribute to the generation of new knowledge that advances health and quality of life.

Clinical pharmacists care for patients in all health care settings. Clinical pharmacist researchers generate, disseminate, and apply new knowledge that contributes to improved health and quality of life.

Within the system of health care, clinical pharmacists are experts in the therapeutic use of medications. They routinely provide medication therapy evaluations and recommendations to patients and health care professionals. Clinical pharmacists are a primary source of scientifically valid information and advice regarding the safe, appropriate, and cost-effective use of medications.

## **Int. C. Length of educational program**

The educational program in clinical pharmacy must be 24 months in length. <sup>(Core)</sup>

### **I. Oversight**

#### **I.A. Sponsoring Institution**

The Sponsoring Institution is the entity that assumes the ultimate financial and academic responsibility for a program of Graduate Pharmacy Education, consistent with the NIHS Institutional Requirements.

The Sponsoring Institution must be the primary clinical site defined as the most utilized rotation site of clinical activity for the program.

**Background and Intent:** *Participating sites will reflect the health care needs of the community and the educational needs of the residents. A wide variety of organizations may provide a robust educational experience and, thus, Sponsoring Institutions and participating sites should encompass inpatient and outpatient settings.*

I.A.1. The program must be sponsored by one NIHS-accredited Sponsoring Institution. <sup>(Core)</sup>

#### **I.B. Participating Sites**

A participating site is an entity that provides educational experiences or educational assignments/rotations for residents.

I.B.1. The program, with approval of its Sponsoring Institution, must designate a primary clinical site. <sup>(Core)</sup>

I.B.2. There must be a program letter of agreement (PLA) between the program and each participating site that governs the relationship between the program and the participating site providing a required assignment. <sup>(Core)</sup>

I.B.2.a) The PLA must:

I.B.2.a)(1) be renewed at least every 5 years; <sup>(Core)</sup>

I.B.2.a)(2) be approved by the designated institutional official (DIO); <sup>(Core)</sup>

I.B.2.a)(3) specify the duration and content of the educational experience; <sup>(Core)</sup>

I.B.2.a)(4) state the policies and procedures that will govern resident education during the assignment; <sup>(Core)</sup>

I.B.2.a)(5) identify the faculty members who will assume educational and supervisory responsibility for residents; <sup>(Core)</sup>

I.B.2.a)(6) specify the responsibilities for teaching, supervision, and formal evaluation of residents. <sup>(Core)</sup>

I.B.3. The program must monitor the learning and working environment at all participating sites. <sup>(Core)</sup>

I.B.3.a) At each participating site there must be one faculty member, designated by the program director as the site director/coordinator, who is accountable for resident education at that site, in collaboration with the program director. <sup>(Core)</sup>

**Background and Intent:** *While all residency programs must be sponsored by a single NIHS-accredited Sponsoring Institution, many programs will utilize other clinical settings to provide required or elective training experiences. At times it is appropriate to utilize sites may be remote for geographic, transportation, or communication issues. When utilizing such sites, the program must ensure the quality of the educational experience.*

I.B.4. The program director must submit any additions or deletions of participating sites routinely providing an educational experience, required for all residents, of one-month full time equivalent (FTE) or more through NIHS Accreditation System. <sup>(Core)</sup>

I.B.5. Resident assignments away from the Sponsoring Institution should not prevent residents' regular participation in required didactics. <sup>(Core)</sup>

I.B.5. Each of the practice sites that provide residency training must meet the requirements regarding faculty availability and pharmacy service described further in the document. <sup>(Core)</sup>

### **I.C. Recruitment**

The program, in partnership with its Sponsoring Institution, must engage in practices that focus on mission-driven, ongoing, systematic recruitment and retention of a diverse and inclusive workforce of residents, , clinical pharmacists, faculty members, senior administrative staff members, and other relevant members of its academic community. <sup>(Core)</sup>

### **I.D. Resources**

I.D.1. The program, in partnership with its Sponsoring Institution, must ensure the availability of adequate resources for resident education. <sup>(Core)</sup>

I.D.2. The program, in partnership with its Sponsoring Institution, must ensure healthy and safe learning and working environments that promote resident well-being and provide for <sup>(Core)</sup>:

I.D.2.a) access to food while on duty; <sup>(Core)</sup>

I.D.2.b) clean and private facilities for lactation that have refrigeration capabilities, with proximity appropriate for safe patient care; <sup>(Core)</sup>

**Background and Intent:** Sites must provide private and clean locations where residents may lactate and store the milk within a refrigerator. These locations should be near clinical responsibilities. It would be helpful to have additional support within these locations that may assist the resident with the continued care of patients, such as a computer and a phone. While space is important, the time required for lactation is also critical for the well-being of the resident and the resident's family.

I.D.2.c) security and safety measures appropriate to the participating Site; <sup>(Core)</sup>

I.D.2.d) accommodations for residents with disabilities consistent with the Sponsoring Institution's policy. <sup>(Core)</sup>

I.D.3. The residency program must provide residents an area in which to work, references, an appropriate level of relevant technology (e.g., clinical information systems, workstations, databases), access to extramural educational opportunities (e.g., a pharmacy association meeting, a regional residency conference), and sufficient financial support to fulfil the responsibilities of the program. <sup>(Core)</sup>

I.D.4. The program's educational, pharmaceutical, and clinical resources must be adequate to support the number of residents appointed to the program. <sup>(Core)</sup>

#### I.D.5. Pharmacy Services

Pharmacy services, patient care sites or other practice operations providing pharmacy residency training must comply with the most current edition of the UAE health authority's best practices for clinical pharmacy practice, and, when necessary, other pharmacy association guides to professional practice and other relevant standards (e.g., ASHP). <sup>(Core)</sup>

##### I.D.5.a) Pharmacist Executive

The pharmacy must be led and managed by a professional, legally qualified pharmacist. <sup>(Core)</sup>

I.D.5.b) The pharmacy must be an integral part of the health-care delivery system at the practice site in which the residency program is offered, as evidenced by the following:

I.D.5.b)(1) the scope and quality of pharmacy services provided to patients at the practice site is based upon the mission of the pharmacy department and an assessment

of pharmacy services needed to provide care to patients served by the practice site; <sup>(Core)</sup>

I.D.5.b)(2) the practice site includes pharmacy in the planning of patient care services; <sup>(Core)</sup>

I.D.5.b)(3) the scope of pharmacy services is documented and evidenced in practice and quality measures; <sup>(Core)</sup>

I.D.5.b)(4) pharmacy services extend to all areas of the practice site in which medications for patients are prescribed, dispensed, administered, and monitored; <sup>(Core)</sup>

I.D.5.b)(5) pharmacists are responsible for the procurement, preparation, distribution, and control of all medications used; <sup>(Core)</sup>

I.D.5.b)(6) pharmacists are responsible for collaborating with other health professionals to ensure safe medication-use systems and optimal drug therapy. <sup>(Core)</sup>

I.D.5.c) The pharmacist executive must provide effective leadership and management for the achievement of short- and long-term goals of the pharmacy and the organization for medication-use and medication-use policies. <sup>(Core)</sup>

I.D.5.d) The pharmacist executive must ensure that the following elements associated with a well-managed pharmacy are in place (as appropriate to the practice setting): <sup>(Core)</sup>

I.D.5.d)(1) a pharmacy mission statement; <sup>(Core)</sup>

I.D.5.d)(2) a well-defined pharmacy organizational structure; <sup>(Core)</sup>

I.D.5.d)(3) current policies and procedures which are available readily to staff participating in service provision; <sup>(Core)</sup>

I.D.5.d)(4) position/job descriptions for all categories of pharmacy personnel, including residents; <sup>(Core)</sup>

I.D.5.d)(5) procedures to document patient care outcomes data; <sup>(Core)</sup>

I.D.5.d)(6) procedures to ensure medication-use systems (ordering, dispensing, administration, and monitoring) are safe and effective; <sup>(Core)</sup>

I.D.5.d)(7) procedures to ensure clinical pharmacy services are safe and effective; <sup>(Core)</sup>

I.D.5.d)(8) a staff complement that is competent to perform the duties and responsibilities assigned (e.g., clinical and distributive services). <sup>(Core)</sup>

I.D.5.e) Pharmacy leaders ensure pharmacy's compliance with:

I.D.5.e)(1) all applicable contemporary federal, and local laws, codes, statutes, and regulations governing pharmacy practice unique to the practice site; <sup>(Core)</sup>

I.D.5.e)(2) current practice standards and guidelines of UAE; <sup>(Core)</sup>

I.D.5.e)(3) current international practice standards and guidelines. <sup>(Core)</sup>

I.D.5.f) The medication distribution system includes the following components (as applicable to the practice setting):

I.D.5.f)(1) effective use of personnel (e.g., technicians); <sup>(Core)</sup>

I.D.5.f)(2) a unit-dose drug distribution service; <sup>(Core)</sup>

I.D.5.f)(3) an intravenous admixture and sterile product service; <sup>(Core)</sup>

I.D.5.f)(4) a research pharmacy including an investigational drug service; <sup>(Core)</sup>

I.D.5.f)(5) an extemporaneous compounding service; <sup>(Core)</sup>

I.D.5.f)(6) a system for handling hazardous drugs; <sup>(Core)</sup>

I.D.5.f)(7) a system for the safe use of all medications, (e.g., high alert, look-alike/sound-alike, emergency preparedness programs, medical emergencies); <sup>(Core)</sup>

I.D.5.f)(8) a secure system for the use of controlled substances; <sup>(Core)</sup>

I.D.5.f)(9) a controlled floor-stock system for medications administered; <sup>(Core)</sup>

I.D.5.f)(10) an outpatient drug distribution service including a patient assessment and counseling area; <sup>(Core)</sup>

I.D.5.f)(11) a system ensuring accountability and optimization for the use of safe medication-use system technologies. <sup>(Core)</sup>



I.D.5.g) The following patient care services and activities are provided by pharmacists in collaboration with other health-care professionals to optimize medication therapy for patients:

I.D.5.g)(1) membership on interdisciplinary teams in patient care areas; <sup>(Core)</sup>

I.D.5.g)(2) prospective participation in the development of individualized medication regimens and treatment plans; <sup>(Core)</sup>

I.D.5.g)(3) implementation and monitoring of treatment plans for patients; <sup>(Core)</sup>

I.D.5.g)(4) identification and responsibility for resolution of medication-related problems; <sup>(Core)</sup>

I.D.5.g)(5) review of the appropriateness and safety of medication prescriptions/orders; <sup>(Core)</sup>

I.D.5.g)(6) development of treatment protocols, care bundles, order sets, and other systematic approaches to therapies involving medications for patients; <sup>(Core)</sup>

I.D.5.g)(7) participation as a provider of individual and population-based patient care services and disease state management, initiating and modifying drug therapy, based on collaborative practice agreements or other treatment protocols; <sup>(Core)</sup>

I.D.5.g)(8) a system to identify appropriately trained and experienced pharmacists and ensure quality care is provided, including when pharmacists are practicing under collaborative practice agreements (e.g., complete credentialing and privileging for pharmacists providing patient care service); <sup>(Core)</sup>

I.D.5.g)(9) documentation of significant patient care recommendations and resulting actions, treatment plans, and progress notes in the appropriate section of patients' permanent medical records; <sup>(Core)</sup>

I.D.5.g)(10) medication administration consistent with laws, regulations, and practice site policy; <sup>(Core)</sup>

I.D.5.g)(11) disease prevention and wellness promotion programs (e.g., smoking cessation, immunization); <sup>(Core)</sup>

I.D.5.g)(12) a system to ensure and support continuity-of-care during patient care transitions; <sup>(Core)</sup>

I.D.5.g)(13) drug use policy activities including, but not limited to, the following (as applicable to the practice setting): <sup>(Core)</sup>

I.D.5.g)(13)(a) developing and maintaining an evidence-based formulary; <sup>(Core)</sup>

I.D.5.g)(13)(b) educating health care providers on timely medication-related matters and medication policies; <sup>(Core)</sup>

I.D.5.g)(13)(c) development and monitoring of evidence-based medication-use guidelines, policies, and order sets; <sup>(Core)</sup>

I.D.5.g)(13)(d) managing adverse drug event monitoring, resolution, reporting, and prevention programs; <sup>(Core)</sup>

I.D.5.g)(13)(e) managing selection, procurement, storage, and dispensing of medications used within the organization. <sup>(Core)</sup>

I.D.5.h) The pharmacy practice must have personnel, facilities, and other resources to carry out a broad scope of pharmacy services (as applicable to the practice setting). <sup>(Core)</sup>

The pharmacy's:

I.D.5.h)(1) facilities are designed, constructed, organized, and equipped to promote safe and efficient work; <sup>(Core)</sup>

I.D.5.h)(2) professional, technical, and clerical staff complement is sufficient and diverse enough to ensure that the department can provide the level of service required by all patients served; <sup>(Core)</sup>

I.D.5.h)(3) resources can accommodate the training of the current and future workforce (e.g., residents, students, technicians, and others). <sup>(Core)</sup>

I.D.5.i) Continuous Quality Improvement

I.D.5.i)(1) Pharmacy department personnel must engage in an on-going process to assess the quality of pharmacy services. <sup>(Core)</sup>

I.D.5.i)(2) Pharmacy department personnel must develop and implement pharmacy services improvement initiatives to respond to assessment results. (Core)

I.D.5.i)(3) The pharmacy department's assessment and improvement process must include assessing and developing skills of the of pharmacy department's staff. (Core)

## **I.E. Other Learners and Other Care Providers**

The presence of other learners and other care providers, including, but not limited to, residents from other programs, subspecialty fellows, and advanced practice providers, must enrich the appointed residents' education. (Core)

I.E.1. The program must report circumstances when the presence of other learners has interfered with the residents' education to the DIO and to the institutional graduate medical education committee (GMEC). (Core)

**Background and Intent:** *The clinical learning environment has become increasingly complex and often includes care providers, students, and post-graduate residents from multiple disciplines. The presence of these practitioners and their learners enrich the learning environment. Programs have a responsibility to monitor the learning environment to ensure that residents' education is not compromised by the presence of other providers and learners.*

## **II. Personnel**

### **II.A. Program Director**

II.A.1. There must be one faculty member appointed as program director who must be a pharmacist from the sponsoring institution, with authority and accountability for the overall program, including compliance with all applicable program requirements. (Core)

II.A.1.a) The Sponsoring Institution's GMEC must approve a change in program director. (Core)

II.A.1.b) Final approval of the program director resides with the Central Accreditation Committee. (Core)

II.A.1.c) The program must demonstrate retention of the program director for a length of time adequate to maintain continuity of leadership and program stability. (Core)

**Background and Intent:** *The success of residency programs is generally enhanced by continuity in the program director position. The professional activities required of a program director are unique and complex and take time to master. All programs are*

*encouraged to undertake succession planning to facilitate program stability when there is necessary turnover in the program director position.*

II.A.2. At a minimum, the program director must be provided with the salary support required to devote 50 percent FTE of non-pharmacy time to the administration of the program. <sup>(Core)</sup>

II.A.3. Qualifications of the program director

II.A.3.a) must include specialty expertise and at least seven years of documented educational and/or administrative experience, or qualifications acceptable to the Central Accreditation Committee; <sup>(Core)</sup>

**Background and Intent:** *Leading a program requires knowledge and skills that are established during residency and subsequently further developed. The time from completion of residency until assuming the role of program director allows the individual to cultivate leadership abilities while becoming professionally established. The three-year period is intended for the individual's professional maturation.*

*In certain circumstances, the program and Sponsoring Institution may propose, and the Central Accreditation Committee may accept a candidate for program director who fulfills these goals but does not meet the three-year minimum.*

II.A.3.b) must be licensed as clinical pharmacist and have completed a structured residency program in clinical pharmacy and a minimum of 5 years of clinical pharmacy practice experience; or without completion of a structured residency, have 7 or more years of clinical pharmacy practice experience. <sup>(Core)</sup>

II.A.3.d) must have an ongoing clinical/pharmacy activity; <sup>(Core)</sup>

**Background and Intent:** *A program director is a role model for faculty members and residents. The program director must participate in clinical/pharmacy activity consistent with the specialty. This activity will allow the program director to role model the Competencies for the faculty members and residents.*

II.A.4. Program Director Responsibilities

The program director must have responsibility, authority, and accountability for administration and operations; teaching and scholarly activity; resident recruitment and selection, evaluation, and promotion of residents, and disciplinary action; supervision of residents; and resident education in the context of patient care. <sup>(Core)</sup>

II.A.4.a) The program director must:

II.A.4.a)(1) be a role model of professionalism for clinical pharmacy practice, as evidenced by; <sup>(Core)</sup>

II.A.4.a)(1)(a) leadership within the pharmacy department or within the organization, through a documented record of improvements in and contributions to pharmacy practice; <sup>(Core)</sup>

II.A.4.a)(1)(a) demonstrating ongoing professionalism and contribution to the profession; <sup>(Core)</sup>

II.A.4.a)(1)(a) representing pharmacy on appropriate drug policy and other committees of the pharmacy department or within the organization. <sup>(Core)</sup>

**Background and Intent:** *The program director, as the leader of the program, must serve as a role model to residents in addition to fulfilling the technical aspects of the role. As residents are expected to demonstrate compassion, integrity, and respect for others, they must be able to look to the program director as an exemplar. It is of utmost importance, therefore, that the program director model outstanding professionalism, high quality patient care, educational excellence, and a scholarly approach to work. The program director creates an environment where respectful discussion is welcome, with the goal of continued improvement of the educational experience.*

II.A.4.a)(2) design and conduct the program in a fashion consistent with the needs of the community, the mission(s) of the Sponsoring Institution, and the mission(s) of the program; <sup>(Core)</sup>

II.A.4.a)(3) administer and maintain a learning environment conducive to educating the residents. in the competency domains; <sup>(Core)</sup>

II.A.4.a)(4) develop and oversee a process to evaluate candidates prior to approval as program faculty members for participation in the residency program education and at least annually thereafter; <sup>(Core)</sup>

II.A.4.a)(4)(a) implementing use of criteria for appointment and reappointment of faculty; <sup>(Core)</sup>

II.A.4.a)(4)(b) evaluation, skills assessment, and development of faculty in the program; <sup>(Core)</sup>

II.A.4.a)(4)(c) creating and implementing a faculty development plan for the residency program. <sup>(Core)</sup>

II.A.4.a)(5) have the authority to approve and/or remove program faculty members for participation in the residency program education at all sites; <sup>(Core)</sup>

II.A.4.a)(6) have the authority to remove residents from supervising interactions and/or learning environments that do not meet the standards of the program; <sup>(Core)</sup>

**Background and Intent:** *The program director has the responsibility to ensure that all who educate residents effectively role model the Core Competencies. Working with a resident is a privilege that is earned through effective teaching and professional role modeling. This privilege may be removed by the program director when the standards of the clinical learning environment are not met.*

*There may be faculty in a department who are not part of the educational program, and the program director controls who is teaching the residents.*

II.A.4.a)(7) submit accurate and complete information required and requested by the DIO, GMEC, and NIHS. <sup>(Core)</sup>

II.A.4.a)(8) provide applicants who are offered an interview with information related to the applicant's eligibility for the relevant specialty board examination(s); <sup>(Core)</sup>

II.A.4.a)(9) provide a learning and working environment in which residents have the opportunity to raise concerns and provide feedback in a confidential manner as appropriate, without fear of intimidation or retaliation; <sup>(Core)</sup>

II.A.4.a)(10) ensure the program's compliance with the Sponsoring Institution's policies and procedures related to grievances and due process; <sup>(Core)</sup>

II.A.4.a)(11) ensure the program's compliance with the Sponsoring Institution's policies and procedures for due process when action is taken to suspend or dismiss, not to promote, or not to renew the appointment of a resident; <sup>(Core)</sup>

**Background and Intent:** *A program does not operate independently of its Sponsoring Institution. It is expected that the program director will be aware of the Sponsoring Institution's policies and procedures and will ensure they are followed by the program's leadership, faculty members, support personnel, and residents.*

II.A.4.a)(12) ensure the program's compliance with the Sponsoring Institution's policies and procedures on employment and non-discrimination; <sup>(Core)</sup>

II.A.4.a)(13) document verification of program completion for all graduating residents; within 30 days; <sup>(Core)</sup>

II.A.4.a)(14) obtain review and approval of the Sponsoring Institution's DIO before submitting information, as required in the Institutional Requirements and outlined in the NIHS guidelines to the Common Program Requirements; <sup>(Core)</sup>

II.A.4.a)(15) organize and monitor the Clinical Competency Committee and Program Evaluation Committee that provides guidance for residency program conduct and related issues; <sup>(Core)</sup>

II.A.4.a)(16) oversee the progression of residents within the program and provide documentation of completed requirements; <sup>(Core)</sup>

II.A.4.a)(17) foster continuous residency program improvement in conjunction with the Program Evaluation Committee; <sup>(Core)</sup>

II.A.4.a)(18) work with pharmacy administration. <sup>(Core)</sup>

#### II.A.5. Associate Program Director (APD):

II.A.5.a) For programs with an approved resident complement of more than 15, one of the clinical pharmacy-certified core faculty members must be appointed as associate program director to assist the program director with the administrative and clinical oversight of the program. <sup>(Core)</sup>

II.A.5.b) Sponsoring institution to provide APD with 0.3 FTE (or 12 hours per week) of protected time for education and program administration. <sup>(Core)</sup>

II.A.5.c) APD should assume the role for a duration suitable for ensuring program continuity and stability. <sup>(Core)</sup>

## **II.B. Faculty**

Faculty members are a foundational element of Graduate Pharmacy Education. They teach residents how to care for patients and provide an important bridge allowing residents to grow and become practice-ready, ensuring that patients receive the highest quality of care.

Faculty members ensure that patients receive the level of care expected from a specialist in the field. They recognize and respond to the needs of the patients, residents, community, and institution. Faculty members provide appropriate levels of supervision to promote patient safety. Faculty members create an effective learning environment by acting in a professional manner and attending to the well-being of the residents and themselves.

**Background and Intent:** *“Faculty” refers to the entire teaching force responsible for educating residents. The term “faculty,” including “core faculty,” does not imply or require an academic appointment or salary support.*

II.B.1. At each participating site, the residency program must provide enough qualified faculty members to ensure appropriate training, supervision, and guidance to all residents to fulfil the requirements of the standards at that location. <sup>(Core)</sup>

II.B.1.a) The ratio of all faculty to residents is a minimum of 1:1. <sup>(Core)</sup>

II.B.2. Faculty members must demonstrate the ability to precept residents’ learning experiences by meeting one or more qualifying characteristics in all following areas:

II.B.2.a) demonstrate the ability to precept residents’ learning experiences by use of clinical teaching roles (i.e., instructing, modeling, coaching, facilitating) at the level required by residents; <sup>(Core)</sup>

II.B.2.b) demonstrate the ability to assess residents’ performance; <sup>(Core)</sup>

II.B.2.c) recognition in the area of pharmacy practice for which they serve as faculty; <sup>(Core)</sup>

II.B.2.d) ongoing an established, active practice in the area for which they serve as faculty; <sup>(Core)</sup>

II.B.2.e) maintenance of continuity of practice during the time of residents’ learning experiences; <sup>(Core)</sup>

II.B.2.f) ongoing professionalism, including a personal commitment to advancing the profession. <sup>(Core)</sup>

II.B.2.g) demonstrate commitment to the delivery of safe, quality, cost-effective, patient-centered care; <sup>(Core)</sup>

**Background and Intent:** *Patients have the right to expect quality, cost-effective care with patient safety at its core. The foundation for meeting this expectation is formed during residency. Faculty members model these goals and continually strive for improvement in care and cost, embracing a commitment to the patient and the community they serve.*

II.B.2.h) regularly participate in organized clinical discussions, journal clubs, and conferences; <sup>(Core)</sup>



II.B.2.i) pursue faculty development designed to enhance their skills at least annually; <sup>(Core)</sup>

II.B.2.i)(1) as educators; <sup>(Core)</sup>

II.B.2.i)(2) in quality improvement and patient safety; <sup>(Core)</sup>

II.B.2.i)(3) in fostering their own and their residents' well-being; <sup>(Core)</sup>

II.B.2.i)(4) in patient care based on their practice-based learning and improvement efforts. <sup>(Core)</sup>

II.B.2.j) demonstrate commitment to advancing the residency program and pharmacy services. <sup>(Core)</sup>

### II.B.3. Faculty Qualifications

II.B.3.a) Faculty members must have appropriate qualifications in their field and hold appropriate institutional appointments. <sup>(Core)</sup>

II.B.3.b) Pharmacy faculty members must:

II.B.3.b)(1) have a current license in clinical pharmacy or other specialty as required, or possess qualifications judged acceptable to the Central Accreditation Committee. <sup>(Core)</sup>

II.B.3.b)(1)(a) have clinical pharmacy practice experience; <sup>(Core)</sup>

II.B.3.b)(1)(b) have completed a structured residency program in clinical pharmacy and a minimum of 3 years of clinical pharmacy practice experience; or without completion of a structured residency, have five or more years of clinical pharmacy practice experience. <sup>(Core)</sup>

### II.B.3.c) Faculty-in-Training

Pharmacists new to precepting who do not meet the qualifications for residency preceptors in sections II.B.3.b)(1) above (also known as faculty-in-training) must: <sup>(Core)</sup>

II.B.3.c)(1) be assigned an advisor or coach who is a qualified faculty; <sup>(Core)</sup>

II.B.3.c)(2) have a documented faculty development plan to meet the qualifications for becoming a residency faculty within two years. <sup>(Core)</sup>

II.B.3.d) Any non-pharmacist faculty members who participate in residency program education (e.g., physicians, certified nurse practitioners) must be approved by the program director. <sup>(Core)</sup>

When non-pharmacists are utilized as faculty:

II.B.3.d)(1) the learning experience must be scheduled after the program director and faculty agree that residents are ready for independent practice; <sup>(Core)</sup>

II.B.3.d)(2) a pharmacist faculty works closely with the non-pharmacist faculty to select the educational goals and objectives for the learning experience. <sup>(Core)</sup>

#### II.B.4. Core Faculty

Core faculty members must have a significant role in the education and supervision of residents and must devote a significant portion of their entire effort to fellow education and/or administration, and must, as a component of their activities, teach, evaluate, and provide formative feedback to fellows. <sup>(Core)</sup>

**Background and Intent:** Core faculty members are critical to the success of resident education. They support the program leadership in developing, implementing, and assessing curriculum and in assessing residents' progress toward achievement of competence in the specialty. Core faculty members should be selected for their broad knowledge of and involvement in the program, permitting them to effectively evaluate the program, including completion of the annual NIHS Faculty annual survey.

II.B.4.a) Core faculty members must be designated by the program director. <sup>(Core)</sup>

II.B.4.b) Core faculty members must complete the annual NIHS Faculty Survey. <sup>(Core)</sup>

II.B.4.c) The ratio of core faculty to residents must be a minimum of 1:2. <sup>(Core)</sup>

#### II.C. Program Coordinator

II.C.1. There must be a program coordinator. <sup>(Core)</sup>

II.C.2. At a minimum, the program coordinator must be provided with adequate time for the administration of the program. <sup>(Core)</sup>

#### II.D. Other Program Personnel

The program, in partnership with its Sponsoring Institution, must jointly ensure the availability of necessary personnel for the effective administration of the program. <sup>(Core)</sup>

**Background and Intent:** Multiple personnel may be required to effectively administer a program. These may include staff members with clerical skills, project managers, education experts, and staff members to maintain electronic communication for the program. These personnel may support more than one program in more than one discipline.

### III. Resident Appointments

#### III.A. Eligibility Requirements

III.A.1. An applicant must meet the following qualifications to be eligible for appointment to a NIHS -accredited program. <sup>(Core)</sup>

III.A.1.a) Refer to NIHS criteria included in the Training Bylaw. <sup>(Core)</sup>

III.A.2. All prerequisite post-graduate education required for transfer into NIHS-accredited residency programs must be completed in a NIHS-accredited residency programs, or in residency programs approved by the NIHS. <sup>(Core)</sup>

III.A.2.a) The residency program director or designee must evaluate the qualifications of applicants to pharmacy residencies through a documented, formal, procedure based on predetermined criteria. <sup>(Core)</sup>

III.A.2.b) The predetermined criteria and procedure used to evaluate applicants' qualifications must be used by all involved in the evaluation and ranking of applicants. <sup>(Core)</sup>

III.A.2.c) Applicants to pharmacy residencies should be graduates of an accredited pharmacy degree program. <sup>(Core)</sup>

III.A.2.c)(1) At a minimum, the pharmacy degree program must be a five-year program. <sup>(Core)</sup>

III.A.2.d) Applicants to pharmacy residencies must be licensed or eligible for licensure by any of the UAE licensing authorities before starting residency. <sup>(Core)</sup>

III.A.2.e) Prior to appointment in the program, residents must fulfill the NIHS eligibility criteria. <sup>(Core)</sup>

III.A.3. Requirements for successful completion and expectations of the residency program must be documented and provided to applicants invited to interview, including policies for professional, family, and sick leaves and the consequences of any such leave on residents' ability to complete the residency program and for dismissal from the residency program. <sup>(Core)</sup>

III.A.3.a) These policies must be reviewed with residents and be consistent with the organization's human resources policies. <sup>(Core)</sup>

III.A.4. The residency program director must provide residents who are accepted into the program with a letter outlining their acceptance to the program. <sup>(Core)</sup>

III.A.4.a) Information on the pre-employment requirements for their organization (e.g., licensure and human resources requirements, such as drug testing, criminal record check) and other relevant information (e.g., benefits, stipend) must be provided. <sup>(Core)</sup>

III.A.4.b) Acceptance by residents of these terms and conditions, requirements for successful completion, and expectations of the residency program must be documented prior to the beginning of the residency. <sup>(Core)</sup>

IV.A.5. Delineation of resident responsibilities for patient care, progressive responsibility for patient management, and graded supervision. <sup>(Core)</sup>

IV.A.5.a) These responsibilities are described for each PGY level and progress is determined by the Clinical Competency Committee (CCC). <sup>(Core)</sup>

### **III.B. Number of Residents**

III.B.1. The program director must not appoint more residents than approved by the Central Accreditation Committee. <sup>(Core)</sup>

III.B.2. All changes in resident complement must be approved by the NIH Central Accreditation Committee. <sup>(Core)</sup>

III.B.3. The number of residents appointed to the program must not exceed the program's educational and clinical resources. <sup>(Core)</sup>

III.B.4. There must be a minimum of two residents in each year of the program. <sup>(Core)</sup>

### **III.C. Resident Transfers**

The program must obtain verification of previous educational experiences and a summative competency-based performance evaluation prior to acceptance of a transferring resident, and evaluations upon matriculation. <sup>(Core)</sup>

## **IV. Educational Program**

The NIHS accreditation system is designed to encourage excellence and innovation in Graduate Pharmacy Education regardless of the organizational affiliation, size, or location of the program.

The educational program must support achievement of the residency's purpose, the development of knowledgeable pharmacists who provide compassionate care.

### **IV.A. Curriculum components**

The Educational Curriculum must contain the following educational components: <sup>(Core)</sup>

IV.A.1. A set of program aims consistent with the Sponsoring Institution's mission, the needs of the community it serves, and the desired distinctive capabilities of its graduates. <sup>(Core)</sup>

IV.A.2. Competency-based goals and objectives for each educational experience are designed to promote progress on a trajectory to autonomous practice. <sup>(Core)</sup>

IV.A.3. These goals and objectives must be distributed and available to residents and faculty members. <sup>(Core)</sup>

IV.A.4. Delineation of resident responsibilities for progressive responsibility for patient management, and graded supervision. <sup>(Core)</sup>

IV.A.5. A broad range of structured didactic activities. <sup>(Core)</sup>

IV.A.4.a) Residents must be provided with protected time to participate in structured core didactic activities. <sup>(Core)</sup>

IV.A.4.b) Didactic activities include, but are not limited to, lectures, conferences, courses, labs, asynchronous learning, case discussions, grand rounds, didactic teaching, journal clubs, and education in critical appraisal of medical evidence. <sup>(Detail)</sup>

IV.A.6. Advancement of residents' knowledge of ethical principles is essential to professionalism. <sup>(Core)</sup>

IV.A.7. Advancement in the residents' knowledge of the basic principles of scientific inquiry, including how to design, conduct, and evaluate clinical research, explanation of it to patients, and applied to pharmacy and patient care. <sup>(Core)</sup>

### **IV.B. Clinical Pharmacist Competencies**

IV.B.1. The program must integrate the following specific clinical pharmacist competencies into the curriculum: <sup>(Core)</sup>

#### IV.B.1.a) Professionalism

Professionalism is expected of all health care providers and should be central to pharmacists' practices over their lifetime.

Clinical trainees must demonstrate the values of professionalism:  
(Core)

IV.B.1.a)(1) Uphold the highest standards of integrity and honesty. (Core)

**Background and Intent:** *The oath of a pharmacist declares a commitment to serve patients, pursue optimal health outcomes, and act according to the highest moral, ethical, and legal conduct.*

IV.B.1.a)(2) Commit to a "fiducial" relationship with patients, always working in their best interests. (Core)

**Background and Intent:** *As professionals, clinical pharmacists must make it their primary obligation to establish to a "fiducial" relationship with those they serve. In exchange for this "gift of trust," they promise to work in the best interests of individual patients and patient populations, within the context of legal and ethical parameters. This covenantal relationship lies at the core of the clinical pharmacist's relationship with the patient.*

IV.B.1.a)(3) Exhibit the traits of professionalism: (Core)

IV.B.1.a)(3)(a) responsibility, (Core)

IV.B.1.a)(3)(b) commitment to excellence, (Core)

IV.B.1.a)(3)(c) respect for others, (Core)

IV.B.1.a)(3)(d) honesty and integrity, (Core)

IV.B.1.a)(3)(e) care and compassion. (Core)

IV.B.1.a)(4) Subscribe to the pharmacy profession's code of ethics and adhere to all pharmacist-related legal and ethical standards. (Core)

IV.B.1.a)(5) Serve as a credible role model/leader for students, trainees, and colleagues by both exhibiting and providing guidance on the values and behaviors of a professional. (Core)

IV.B.1.a)(6) Advance clinical pharmacy through professional stewardship, training of future clinical pharmacists, and active engagement in professional societies. (Core)

#### IV.B.1.b) Patient Care and Procedural Skills

Clinical pharmacists work in collaboration with other providers to deliver comprehensive medication management that optimizes patient outcomes. Care is coordinated among providers and across systems of care as patients transition in and out of various settings.

The clinical pharmacy residents should have the experience and skills in the process of care comprising the following components:  
(Core)

IV.B.1.b)(1) Assessment of patients, including identifying and prioritizing patient problems and medication-related needs.

The residents must assess medication-related needs by:  
(Core)

IV.B.1.b)(1)(a) reviewing the medical record using a problem-oriented framework (e.g., interpreting and analyzing subjective and objective information) to determine the clinical status of the patient; (Core)

IV.B.1.b)(1)(b) meeting with the patient/caregivers to obtain and document a complete medication history to identify all of the patient's current medications (including regimens and administration routes), medication-taking behaviors, adherence, allergies, and attitudes and experiences with medication therapy; (Core)

IV.B.1.b)(1)(c) obtaining, organizing, and interpreting patient data; (Core)

IV.B.1.b)(1)(d) prioritizing patient problems and medication-related needs with focus on: (Core)

IV.B.1.b)(1)(d)(i) the indication/absence of indication, use and administration, therapeutic goals, adverse drug events, drug interactions, and monitoring of medications; (Core)

IV.B.1.b)(1)(d)(ii) the patient's adherence, attitudes, beliefs, and preferences regarding his/her medications; (Core)

IV.B.1.b)(1)(d)(iii) any allergies or adverse reactions to medications. <sup>(Core)</sup>

IV.B.1.b)(2) Evaluate drug therapy for appropriateness, effectiveness, safety, adherence, and affordability

The residents must identify strategies to optimize medication therapy by: <sup>(Core)</sup>

IV.B.1.b)(2)(a) assessing, with other members of the health care team, the appropriateness of current medications on the basis of health conditions, indication, and the therapeutic goals of each medication; <sup>(Core)</sup>

IV.B.1.b)(2)(b) evaluating the effectiveness, safety, and affordability of each medication; <sup>(Core)</sup>

IV.B.1.b)(2)(c) assessing medication-taking behaviors and adherence to each medication; <sup>(Core)</sup>

IV.B.1.b)(2)(d) identifying medication-related problems and evaluating collaboratively with other members of the health care team the need for intervention. <sup>(Core)</sup>

IV.B.1.b)(3) Develop/initiate therapeutic plans and address medication-related problems

The residents must demonstrate skills in development and implementation, collaboratively with the patient and his/her health care providers, of a plan for optimizing medication therapy by: <sup>(Core)</sup>

IV.B.1.b)(3)(a) reviewing the patient's active medical problem list to inform and guide the development of an individualized assessment and plan for optimizing medication therapy; <sup>(Core)</sup>

IV.B.1.b)(3)(b) formulating a comprehensive medication management assessment and plan in collaboration with the health care team and implementing this plan to achieve patient-specific outcomes; <sup>(Core)</sup>

IV.B.1.b)(3)(c) educating the patient/caregivers (both verbally and in writing) to ensure understanding of the care plan, to optimize



adherence, and to improve therapeutic outcomes;  
(Core)

IV.B.1.b)(3)(d) establishing patient-specific measurable parameters and time frames for monitoring and follow-up in collaboration with other members of the health care team. (Core)

IV.B.1.b)(4) Follow up on and monitor the outcomes of therapeutic plans.

The residents must perform follow-up evaluations in collaboration with other members of the health care team to continually assess patient outcomes by: (Core)

IV.B.1.b)(4)(a) Coordinating with other providers to ensure that patient follow-up and future encounters are aligned with the patient's medical and medication related needs; (Core)

IV.B.1.b)(4)(b) Revisiting the medical record to obtain updates on the clinical status of the patient and then meeting with the patient/caregivers to obtain an updated medication history to identify, assess, and document any new medication-related needs or problems; (Core)

IV.B.1.b)(4)(c) Conducting ongoing assessments and refining the plan of care to optimize medication therapy and ensure that individual goals are achieved; (Core)

IV.B.1.b)(4)(d) Monitoring, modifying, documenting, and managing the plan of care in collaboration with the patient/caregivers and his/her other health care providers. (Core)

IV.B.1.b)(5) Collaborate with other members of the health care team to achieve optimal patient outcomes across the continuum of care. (Core)

IV.B.1.b)(6) Apply knowledge of the roles and responsibilities of other health care team members to patient care. (Core)

IV.B.1.c) Clinical Knowledge

Residents must:

IV.B.1.c)(1) possess an in-depth knowledge of pharmacology and pharmacotherapy and the scientific/clinical evidence that forms the basis for rational drug therapy; <sup>(Core)</sup>

IV.B.1.c)(2) possess an extensive knowledge of medicine (e.g., pathophysiology and mechanisms of diseases/disorders, clinical presentation, diagnostic tests, and natural history of disease); <sup>(Core)</sup>

IV.B.1.c)(3) be able to understand, analyze, critically evaluate, and apply knowledge from the biomedical, clinical, epidemiological, and social-behavioral sciences to patient care; <sup>(Core)</sup>

IV.B.1.c)(4) demonstrate and apply in-depth knowledge of pharmacology, pharmacotherapy, pathophysiology, and the clinical signs, symptoms, and natural history of diseases and/or disorders; <sup>(Core)</sup>

IV.B.1.c)(5) locate, evaluate, interpret, and assimilate scientific/clinical evidence and other relevant information from the biomedical, clinical, epidemiological, and social-behavioral literature; <sup>(Core)</sup>

IV.B.1.c)(6) use scientific/clinical evidence as the basis for therapeutic decision-making; <sup>(Core)</sup>

IV.B.1.c)(7) maintain and enhance pharmacotherapy knowledge, including recertification or other appropriate methods of self-assessment and learning. <sup>(Core)</sup>

#### IV.B.1.d) Practice-Based Learning and Improvement

Engaging in continuing professional development (CPD) is a core competency of any professional because it reflects a commitment to excellence and an awareness of the need for lifelong learning.

Clinical pharmacists are expected to: <sup>(Core)</sup>

IV.B.1.d)(1) possess the skills of self-awareness, self-assessment, and self-development; <sup>(Core)</sup>

IV.B.1.d)(2) practice at a level reflective of their education, training, and experience; <sup>(Core)</sup>

IV.B.1.d)(3) engage in professional organizations to gain exposure to contemporary clinical practice innovations/

advances, learn about best practices, and forge collaborative relationships; <sup>(Core)</sup>

IV.B.1.d)(4) commit to excellence and lifelong learning; <sup>(Core)</sup>

IV.B.1.d)(5) demonstrate skills of self-awareness, self-assessment, and self-development; <sup>(Core)</sup>

IV.B.1.d)(6) identify and implement strategies for personal improvement through continuing professional development; <sup>(Core)</sup>

IV.B.1.d)(7) provide professional education to students, trainees, or other health professionals. <sup>(Core)</sup>

#### IV.B.1.e) Interpersonal and Communication Skills

Residents in clinical pharmacy are expected to: <sup>(Core)</sup>

IV.B.1.e)(1) communicate effectively with:

IV.B.1.e)(1)(a) patients, caregivers, families, and laypersons of diverse backgrounds; <sup>(Core)</sup>

IV.B.1.e)(1)(b) other health professionals and stakeholders. <sup>(Core)</sup>

IV.B.1.e)(2) provide clear and concise consultations to other health professionals. <sup>(Core)</sup>

IV.B.1.e)(3) develop professional written communications that are appropriate to the audience. <sup>(Core)</sup>

IV.B.1.e)(4) use verbal communications tailored to varied clinical and patient-specific environments. <sup>(Core)</sup>

IV.B.1.e)(5) communicate with appropriate levels of assertiveness, confidence, empathy, and respect. <sup>(Core)</sup>

IV.B.1.e)(6) develop and provide written documentation in the patient's medical record that is compliant with the accepted standards for documentation (and billing, where applicable) within the health system, health care facility, outpatient practice, or pharmacy in which one works. <sup>(Core)</sup>

The following components of the encounter are essential to be include in the documentation, which may be communicated in the form of a traditional SOAP (subjective data, objective data, assessment, plan) note or other framework consistent with the standards of documentation within the practice setting:

IV.B.1.e)(6)(a) Medication history: <sup>(Core)</sup>

IV.B.1.e)(6)(a)(i) a brief summary of the patient's past medication use and related health problems as an introduction to the documentation that will follow; <sup>(Core)</sup>

IV.B.1.e)(6)(a)(ii) a listing of all current medications that include information regarding actual use, adherence, and attitudes toward therapy; <sup>(Core)</sup>

IV.B.1.e)(6)(a)(iii) a listing of medication-related allergies and any adverse drug events that may affect prescribing and monitoring or preclude the future use of a medication. <sup>(Core)</sup>

IV.B.1.e)(6)(b) Active problem list with assessment of each problem: <sup>(Core)</sup>

IV.B.1.e)(6)(b)(i) a listing of current health conditions and supporting data for the status of each condition, emphasizing associated medications and medication-related problems that may have an impact on desired goals; <sup>(Core)</sup>

IV.B.1.e)(6)(b)(ii) A listing of any additional medication-related problems or other medical issues that may be unrelated to current health conditions. <sup>(Core)</sup>

IV.B.1.e)(6)(c) Plan of care to optimize medication therapy and improve patient outcomes: <sup>(Core)</sup>

IV.B.1.e)(6)(c)(i) the specific medication therapy plan that has been or will be implemented collaboratively by the health care team, including drug, dose, route, frequency, and relevant monitoring parameters; <sup>(Core)</sup>

IV.B.1.e)(6)(c)(ii) the collaborative plan for follow-up evaluation and monitoring as well as future visits. <sup>(Core)</sup>

IV.B.1.f) Systems-based practice

Clinical pharmacists' contribution to public health, global health, and population health directly and indirectly affects medication management, including chronic disease prevention and treatment.

Residents should be able to:

IV.B.1.f)(1) use health care delivery systems and health informatics to optimize the care of individual patients and patient populations; <sup>(Core)</sup>

IV.B.1.f)(2) participate in identifying system-based errors and implementing solutions; <sup>(Core)</sup>

IV.B.1.f)(3) resolve medication-related problems to improve patient/population health and quality metrics; <sup>(Core)</sup>

IV.B.1.f)(4) apply knowledge of pharmaco-economics and risk-benefit analysis to patient-specific and/or population-based care; <sup>(Core)</sup>

IV.B.1.f)(5) participate in developing processes to improve transitions of care; <sup>(Core)</sup>

IV.B.1.f)(6) design quality improvement processes to improve medication use. <sup>(Core)</sup>

IV.B.1.g) In addition, programs may select additional competency areas that are required for their program. If so, they must be required for all residents in that program. Elective competency areas may be selected for specific residents only. <sup>(Core)</sup>

#### **IV.C. Curriculum Organization and Resident Experiences**

IV.C.1. The curriculum must be structured to optimize resident educational experiences, the length of these experiences, and supervisory continuity. <sup>(Core)</sup>

IV.C.1.a) Assignment of rotations must be structured with sufficient length to provide a quality educational experience, defined by continuity of patient care, ongoing supervision, relationships with faculty members, and high-quality assessment and feedback. <sup>(Core)</sup>

IV.C.1.b) Clinical experiences should be structured to facilitate learning in a manner that allows residents to function as part of an effective interprofessional team. <sup>(Core)</sup>

IV.C.2. Program Structure

IV.C.2.a) A written description of the structure of the program must be documented formally. <sup>(Core)</sup>

IV.C.2.a)(1) The description must include required learning experiences and the length of time for each experience. <sup>(Core)</sup>

IV.C.2.a)(2) Elective experiences must also be listed in the program's design. <sup>(Core)</sup>

IV.C.2.b) The program's structure must facilitate achievement of the program's educational goals and objectives. <sup>(Core)</sup>

IV.C.2.c) The structure must permit residents to gain experience and sufficient practice with diverse patient populations, a variety of disease states, and a range of patient problems. <sup>(Core)</sup>

IV.C.2.d) Residency programs that are based in certain practice settings (e.g., long-term care, acute care, ambulatory care, hospice, pediatric hospital, home care) must ensure that the program's learning experiences meet the above requirements for diversity, variety, and complexity. <sup>(Core)</sup>

IV.C.2.e) No more than one-third (i.e., 8 months) of the 24-month clinical pharmacy residency program may deal with a specific patient disease state and population (e.g., critical care, oncology, cardiology). <sup>(Core)</sup>

IV.C.2.f) Residents must spend two thirds (i.e., 16 months) or more of the program in direct patient care activities. <sup>(Core)</sup>

IV.C.2.f)(1) Examples of direct patient care activities (but are not limited to this list): <sup>(Core)</sup>

IV.C.2.f)(1)(a) Complete comprehensive medication reviews (i.e., thorough review of medication profiles). <sup>(Core)</sup>

IV.C.2.f)(1)(b) Perform drug therapy management (e.g., anticoagulation management, renal dosing, and pharmacokinetics) and participate in disease state management services. <sup>(Core)</sup>

IV.C.2.f)(1)(c) Collect and organize patient-specific information needed by the pharmacist to prevent, detect, and resolve medication-related problems and to make appropriate evidence-based, patient-centered medication therapy recommendations as part of the interdisciplinary team. <sup>(Core)</sup>

IV.C.2.f)(1)(d) Specify therapeutic goals for patients incorporating the principles of evidence-based medicine that integrate patient-specific data, disease and medication-specific information, ethics, and quality-of-life considerations. (Core)

IV.C.2.f)(1)(e) Design patient-centered regimens and monitor plans that meet the evidence-based therapeutic goals established for patients, which integrates patient-specific information, disease and drug information, ethical issues and quality-of-life issues, and considers pharmacoeconomic principles. (Core)

IV.C.2.f)(1)(f) Recommend or communicate patient-centered, evidence-based therapeutic regimens and correspond monitoring plans to other members of the interdisciplinary team and patients in a way that is systematic, logical, accurate, timely, and secures consensus from the team and patient. (Core)

IV.C.2.f)(1)(g) Initiate, when appropriate, the patient-centered, evidence-based therapeutic regimen and monitoring plan for patients according to the organization's policies and procedures. (Core)

IV.C.2.f)(1)(h) Assess patients' progress toward therapeutic goal(s) and, when necessary, redesign a patient-centered, evidence-based therapeutic plan as necessary based on evaluation of monitoring data and therapeutic outcomes. (Core)

IV.C.2.f)(1)(i) Perform or participate in medication reconciliation. (Core)

IV.C.2.f)(1)(j) Use effective patient education techniques to provide education and counseling to patients and caregivers, including information on medication therapy, adverse effects, compliance, appropriate use, handling, and medication administration. (Core)

IV.C.2.f)(1)(k) Patient-centered preparation and dispensing of medications for individual patients. (Core)

## IV.D. Scholarship

The program and faculty must create an environment that fosters the ability to think critically, evaluate the literature, appropriately assimilate new knowledge, and practice lifelong learning through resident participation in scholarly activities. Scholarly activities must include discovery, integration, application, and teaching.

### IV.D.1. Program Responsibilities

IV.D.1.a) The program must demonstrate evidence of scholarly activities consistent with its mission(s) and aims. <sup>(Core)</sup>

IV.D.1.b) The program, in partnership with its Sponsoring Institution, must allocate adequate resources to facilitate resident and faculty involvement in scholarly activities. <sup>(Core)</sup>

IV.D.1.c) The program must advance residents' knowledge and practice of the scholarly approach to evidence-based patient care. <sup>(Core)</sup>

### IV.D.2. Faculty Scholarly Activity

IV.D.2.a) Among their scholarly activity, programs must demonstrate accomplishments in at least three of the following domains: <sup>(Core)</sup>

- Research in basic science, education, translational science, patient care, or population health
- Peer-reviewed journal publications, case-presentation publications
- Quality improvement and/or patient safety initiatives
- Systematic reviews, meta-analyses, review articles, chapters in pharmacy and medical textbooks, or case reports
- Creation of curricula, evaluation tools, didactic educational activities, or electronic educational materials
- Contribution to professional committees, educational organizations, or editorial boards
- Innovations in education

IV.D.2.b) The program must demonstrate scholarly activity by the following methods:

IV.D.2.b)(1) faculty participation in grand rounds, posters, workshops, quality improvement presentations, podium presentations, reviewed print/electronic resources, articles or publications, book chapters, textbooks, webinars,



service on professional committees, or serving as a journal reviewer, journal editorial board member, or editor; <sup>(Core)</sup>

#### IV.D.3. Resident Scholarly Activity

IV.D.3.a) While in the program, residents must engage in at least one of the following scholarly activities: participation in grand rounds, posters, workshops, quality improvement presentations, podium presentations, grant leadership, non-peer-reviewed print/electronic resources, articles or publications, book chapters, textbooks, webinars, service on professional committees, or serving as a journal reviewer, journal editorial board member, or editor. <sup>(Core)</sup>

IV.D.3.b) Residents must participate in scholarly projects. <sup>(Core)</sup>

IV.D.3.b)(1) Residents must complete a scholarly project relevant to the specialty which was conducted under supervision of a faculty member. <sup>(Core)</sup>

IV.D.3.b)(2) The project, shall be prepared in a form which can be used for publication or presentation and submitted for publication in a specialty specific journal or presented in a national or international specialty conference. <sup>(Core)</sup>

IV.D.3.b)(3) The proof of project submission for publication, or presentation in a pharmacy or medical conference, will be part of the resident's portfolio and will be documented in the final summative evaluation prior to Board Certification, in accordance with NIHS guidelines. <sup>(Core)</sup>

## V. Evaluation

### V.A. Resident Evaluation

The extent of residents' progression toward achievement of the program's required educational goals and objectives must be evaluated.

#### V.A.1. Feedback and Evaluation

Formative and summative evaluation have distinct definitions.

Formative evaluation is monitoring resident learning and providing ongoing feedback that can be used by residents to improve their learning.

More specifically, formative evaluations help:

- residents identify their strengths and weaknesses and target areas that need work.
- program directors and faculty members recognize where residents are struggling and address problems immediately.

Summative evaluation is evaluating a resident's learning by comparing the residents against the goals and objectives of the rotation and program, respectively and is utilized to make decisions about progression to the next level of training, or program completion.

End-of-rotation and end-of-year evaluations have both summative and formative components. Information from a summative evaluation can be used formatively when residents or faculty members use it to guide their efforts and activities in subsequent rotations and to successfully complete the residency program.

#### V.A.1.a) Initial assessment

V.A.1.a)(1) At the beginning of the residency, the program director in conjunction with faculty, must assess each resident's entering knowledge and skills related to the educational goals and objectives. <sup>(Core)</sup>

V.A.1.a)(2) The results of residents' initial assessments must be documented by the program director or designee in each resident's development plan by the end of the orientation period and taken into consideration when determining residents' learning experiences, learning activities, evaluations, and other changes to the program's overall plan. <sup>(Core)</sup>

#### V.A.1.b) Formative (on-going, regular) assessment

V.A.1.b)(1) Faculty must provide on-going feedback to residents about how they are progressing and how they can improve that is frequent, immediate, specific, and constructive. <sup>(Core)</sup>

V.A.1.b)(2) Faculty must make appropriate adjustments to residents' learning activities in response to information obtained through day-to-day informal observations, interactions, and assessments. <sup>(Core)</sup>

#### V.A.1.c) Summative evaluations

V.A.1.c)(1) At the end of each learning experience, residents must receive, and discuss with preceptors, verbal and written assessment on the extent of their progress

toward achievement of assigned educational goals and objectives, with reference to specific criteria. <sup>(Core)</sup>

V.A.1.c)(2) For learning experiences greater than or equal to 12 weeks in length, a documented summative evaluation must be completed at least every three months. <sup>(Core)</sup>

V.A.1.c)(3) If more than one faculty is assigned to a learning experience, all faculty members must provide input into residents' evaluations. <sup>(Core)</sup>

V.A.1.c)(4) For faculty-in-training, both the faculty-in-training and the faculty advisor/coach must sign evaluations. <sup>(Core)</sup>

V.A.1.c)(5) Residents must complete and discuss at least one evaluation of each faculty at the end of the learning experience. <sup>(Core)</sup>

V.A.1.c)(6) Residents must complete and discuss an evaluation of each learning experience at the end of the learning experience.

V.A.1.d) The program must provide an objective performance evaluation based on the Competencies and must: <sup>(Core)</sup>

V.A.1.d)(1) use multiple evaluators (e.g., faculty members, peers, patients, self, and other professional staff members) <sup>(Core)</sup>

V.A.1.d)(2) provide that information to the Clinical Competency Committee for its synthesis of progressive resident performance and improvement toward unsupervised practice. <sup>(Core)</sup>

V.A.1.e) The program director or their designee, with input from the Clinical Competency Committee, must:

V.A.1.e)(1) Meet with and review with each resident their documented quarterly evaluation of performance, including progress. <sup>(Core)</sup>

V.A.1.f) The evaluations of a resident's performance must be accessible for review by the resident. <sup>(Core)</sup>

V.A.1.g) Residents' development plans

V.A.1.g)(1) Each resident must have a personal development plan documented by the RPD or designee. (Core)

V.A.1.g)(2) On a quarterly basis, the RPD or designee must assess residents' progress and determine if the development plan needs to be adjusted. (Core)

V.A.1.g)(3) The development plan and any adjustments must be documented and shared with all faculty. (Core)

#### V.A.1.h) Resident Promotion:

V.A.1.h)(1) The program must have clear promotion criteria from PGY1 to PGY 2. (Core)

V.A.1.h)(1)(a) These criteria must be communicated to faculty and residents. (Core)

V.A.1.h)(2) Residents are eligible to sit for Emirati Board Exam after graduating PGY2. (Core)

V.A.1.h)(3) Refer to NIHS eligibility criteria included in the Training Bylaw. (Core)

#### V.A.2. Final Evaluation

V.A.2.a) The program director must provide a final evaluation for each resident upon completion of the program. (Core)

V.A.2.a)(1) The clinical pharmacy-specific Milestones must be used as tools to ensure residents are able to engage in autonomous practice upon completion of the program, and once he/she obtain the license to practice in clinical pharmacy. (Core)

V.A.2.a)(2) The final evaluation must:

V.A.2.a)(2)(a) become part of the resident's permanent record maintained by the institution, and must be accessible for review by the resident in accordance with institutional policy; (Core)

V.A.2.a)(2)(b) verify that the resident has demonstrated the knowledge, skills, and behaviors necessary to enter autonomous practice; (Core)

V.A.2.a)(2)(c) consider recommendations from the Clinical Competency Committee; (Core)

V.A.2.a)(2)(d) be shared with the resident upon completion of the program. <sup>(Core)</sup>

V.A.2.b) The certificate provided to residents who complete the program's requirements must be signed by the program director and the DIO. <sup>(Core)</sup>

V.A.2.b)(1) Reference must be made in the certificate of residency that the program is accredited by NIHS. <sup>(Core)</sup>

V.A.3. A Clinical Competency Committee must be appointed by the program director. <sup>(Core)</sup>

V.A.3.a) The Clinical Competency Committee must include at least three members of the program faculty, at least one of whom is a core faculty member. <sup>(Core)</sup>

V.A.3.a)(1) Additional members must be faculty members from the same program or other programs, or other health professionals who have extensive contact and experience with the program's residents. <sup>(Core)</sup>

V.C.1.a)(2) The program director has final responsibility for resident evaluation, promotion and program completion decisions. <sup>(Core)</sup>

V.A.3.b) The Clinical Competency Committee must:

V.A.3.b)(1) Review all residents evaluation quarterly. <sup>(Core)</sup>

V.A.3.b)(2) Determine each resident's progress. <sup>(Core)</sup>

V.A.3.b)(3) Meet prior to the residents' quarterly evaluations and advise the program director regarding each resident's progress. <sup>(Core)</sup>

## **V.B. Faculty Evaluation**

V.B.1. The program must have a process to evaluate each faculty member's performance as it relates to the educational program at least annually. <sup>(Core)</sup>

V.B.1.a) This evaluation must include a review of the faculty member's clinical teaching abilities, engagement with the educational program, participation in faculty development related to their skills as an educator, clinical performance, review of patient outcomes, professionalism, research, and scholarly activities. <sup>(Core)</sup>

V.B.1.b) This evaluation must include written, anonymous, and

confidential evaluations by the residents. <sup>(Core)</sup>

V.B.2. Faculty members must receive feedback on their evaluations at least annually. <sup>(Core)</sup>

V.B.3. Results of the faculty educational evaluations should be incorporated into program-wide faculty development plans. <sup>(Core)</sup>

V.B.3.a) The program has the responsibility to evaluate and improve the program faculty members' teaching, scholarship, professionalism, and quality care. Therefore, the annual review of the program's faculty members is mandatory and can be used as input into the Annual Program Evaluation. <sup>(Detail)</sup>

### **V.C. Program Evaluation and Improvement**

V.C.1. The program director must appoint the Program Evaluation Committee to conduct and document the Annual Program Evaluation as part of the program's continuous improvement process. <sup>(Core)</sup>

The performance of residents and faculty members reflects program quality and will use metrics to reflect the program's goals.

The Program Evaluation Committee must present the Annual Program Evaluation Report in a written form to be discussed with all program faculty and residents as a part of continuous improvement plans.

V.C.1.a) The Program Evaluation Committee must be composed of at least two program faculty members, at least one of whom is a core faculty member, and at least one resident. <sup>(Core)</sup>

V.C.1.b) Program Evaluation Committee responsibilities must include:

V.C.1.b)(1) acting as an advisor to the program director, through program oversight; <sup>(Core)</sup>

V.C.1.b)(2) review of the program's requirements, both NIHS Emirati Clinical Pharmacy Board required and program self-determined goals, and the progress toward meeting them; <sup>(Core)</sup>

V.C.1.b)(3) guiding ongoing program improvement, including developing new goals based upon outcomes; <sup>(Core)</sup>

V.C.1.b)(4) review of the current operating environment to identify strengths, challenges, opportunities, and threats related to the program's mission and aims. <sup>(Core)</sup>

V.C.1.c) The Program Evaluation Committee should consider the following elements in its assessment of the program:

V.C.1.c)(1) program curriculum; <sup>(Core)</sup>

V.C.1.c)(2) outcomes from prior Annual Program Evaluation(s); <sup>(Core)</sup>

V.C.1.c)(3) NIHS letters of notification including citations, areas for improvement, and comments; <sup>(Core)</sup>

V.C.1.c)(4) the quality and safety of patient care; <sup>(Core)</sup>

V.C.1.c)(5) Aggregate residents and the faculty:

V.C.1.c)(5)(a) well-being; <sup>(Core)</sup>

V.C.1.c)(5)(b) recruitment and retention following institutional policies; <sup>(Core)</sup>

V.C.1.c)(5)(c) workforce diversity following institutional policies; <sup>(Core)</sup>

V.C.1.c)(5)(d) engagement in quality improvement and patient safety. <sup>(Core)</sup>

V.C.1.c)(5)(e) scholarly activity; <sup>(Core)</sup>

V.C.1.c)(5)(f) Resident and Faculty Surveys; <sup>(Core)</sup>

V.C.1.c)(5)(g) written evaluations of the program (see above). <sup>(Core)</sup>

V.C.1.c)(6) Aggregate resident:

V.C.1.c)(6)(a) in-training examination results; <sup>(Core)</sup>

V.C.1.c)(6)(b) board pass and certification rates; <sup>(Core)</sup>

V.C.1.c)(6)(c) graduates' performance; <sup>(Core)</sup>

V.C.1.c)(7) Aggregate faculty:

V.C.1.c)(7)(a) faculty evaluation; <sup>(Core)</sup>

V.C.1.c)(7)(b) professional development. <sup>(Core)</sup>

V.C.1.d) The Program Evaluation Committee must evaluate the program's mission and aims, strengths, areas for improvement, and threats. <sup>(Core)</sup>

V.C.1.e) The Annual Program Evaluation review, including the action plan, must:

V.C.1.e)(1) be distributed to and discussed with the members of the teaching faculty and the residents; (Core)

V.C.1.e)(2) be submitted to the DIO. (Core)

V.C.1.f) The program director and pharmacy executive must engage in an on-going process of assessment of the residency program including a formal annual program evaluation. (Core)

V.C.1.g) The program director must develop and implement program improvement activities to respond to the results of the assessment of the residency program. (Core)

V.C.1.h) The residency program's continuous quality improvement process must evaluate whether residents fulfil the purpose of a clinical pharmacy residency program through graduate tracking. (Core)

V.C.1.h)(1) Information tracked must include initial employment, and may include changes in employment, board certification, surveys of past graduates, or other applicable information. (Core)

V.C.2. The program will be accredited and reaccredited by the NIHS according with NIHS Accreditation bylaws. (Core)

V.C.2.a) The program must complete a Self-Study before its reaccreditation Site Visit. (Core)

V.C.2.b) The Self-Study is an objective, comprehensive evaluation of the residency program with the aim to improve it. (Core)

V.C.3. The goal of NIHS-accredited education is to train pharmacists who seek and achieve a board certification. One measure of the effectiveness of the educational program is the ultimate pass rate. (Core)

V.C.4. Under the guidance of the Program Director all eligible program graduates should take the certifying examination conducted by the NIHS Emirati Board of Clinical Pharmacy to obtain the Board Certification. (Core)

## **VI. The Learning and Working Environment**

Residency education must occur in the context of a learning and working environment that emphasizes the following principles:

- Excellence in the safety and quality of care rendered to patients by residents today.
- Excellence in the safety and quality of care rendered to patients by today's residents in their future practice.
- Excellence in professionalism through faculty modeling of:



- the effacement of self-interest in a humanistic environment that supports the professional development of pharmacists.
- the joy of curiosity, problem-solving, intellectual rigor, critical thinking, and discovery
- Commitment to the well-being of the students, residents, faculty members, and all members of the health care team

## **VI.A. Patient Safety, Quality Improvement, Supervision and Accountability**

### VI.A.1. Patient Safety and Quality Improvement

All pharmacists share responsibility for promoting patient safety and enhancing quality of patient care. Graduate Pharmacy Education must prepare residents to provide the highest level of clinical care with continuous focus on the safety, individual needs, and humanity of their patients. It is the right of each patient to be cared for by residents who are appropriately supervised; possess the requisite knowledge, skills, and abilities; understand the limits of their knowledge and experience; and seek assistance as required to provide optimal patient care.

Residents must demonstrate the ability to analyze the care they provide, understand their roles within health care teams, and play an active role in system improvement processes. Graduating residents will apply these skills to critique their future unsupervised practice and effect quality improvement measures.

It is necessary for residents and faculty members to consistently work in a well-coordinated manner with other health care professionals to achieve organizational patient safety goals.

#### VI.A.1.a) Patient Safety

##### VI.A.1.a)(1) Culture of Safety

A culture of safety requires continuous identification of vulnerabilities and a willingness to transparently deal with them. An effective organization has formal mechanisms to assess the knowledge, skills, and attitudes of its personnel toward safety in order to identify areas for improvement.

VI.A.1.a)(1)(a) The program, its faculty, residents, and fellows must actively participate in patient safety systems and contribute to a culture of safety.  
(Core)

VI.A.1.a)(1)(b) The program must have a structure that promotes safe, inter-professional, team-based care. (Core)

#### VI.A.1.a)(2) Education on Patient Safety

Programs must provide formal educational activities that promote patient safety-related goals, tools, and techniques. <sup>(Core)</sup>

**Background and Intent:** *Optimal patient safety occurs in the setting of a coordinated inter-professional learning and working environment.*

#### VI.A.1.a)(3) Patient Safety Events

Reporting, investigation, and follow-up of adverse events, near misses, and unsafe conditions are pivotal mechanisms for improving patient safety and are essential for the success of any patient safety program. Feedback and experiential learning are essential to developing true competence in the ability to identify causes and institute sustainable systems-based changes to ameliorate patient safety vulnerabilities.

VI.A.1.a)(3)(a) Residents, fellows, faculty members, and other clinical staff members must:

- know their responsibilities in reporting patient safety events at the clinical site; <sup>(Core)</sup>
- know how to report patient safety events, including near misses, at the clinical site; <sup>(Core)</sup>
- be provided with summary information of their institution's patient safety reports. <sup>(Core)</sup>

VI.A.1.a)(3)(b) Residents must participate as team members in real and/or simulated inter-professional clinical patient safety activities, such as root cause analyses or other activities that include analysis, as well as formulation and implementation of actions. <sup>(Core)</sup>

#### VI.A.1.a)(4) Resident Education and Experience in Disclosure of Adverse Events

Patient-centered care requires patients, and when appropriate families, to be apprised of clinical situations that affect them, including adverse events. This is an important skill for faculty pharmacists to model, and for residents to develop and apply.

VI.A.1.a)(4)(a) All residents must receive training in how to disclose adverse events to patients and families. <sup>(Core)</sup>

VI.A.1.a)(4)(b) Residents should have the opportunity to participate in the disclosure of patient safety events, real or simulated. <sup>(Detail)</sup>

#### VI.A.1.b) Quality Improvement

##### VI.A.1.b)(1) Education in Quality Improvement

A cohesive model of health care includes quality-related goals, tools, and techniques that are necessary in order for health care professionals to achieve quality improvement goals.

Residents must receive training and experience in quality improvement processes, including an understanding of health care disparities. <sup>(Core)</sup>

##### VI.A.1.b)(2) Quality Metrics

Access to data is essential to prioritizing activities for care improvement and evaluating success of improvement efforts.

Residents and faculty members must receive data on quality metrics and benchmarks related to their patient populations. <sup>(Core)</sup>

##### VI.A.1.b)(3) Engagement in Quality Improvement Activities

Experiential learning is essential to developing the ability to identify and institute sustainable systems-based changes to improve patient care.

Residents must have the opportunity to participate in inter-professional quality improvement activities. <sup>(Core)</sup>

#### VI.A.2. Supervision and Accountability

VI.A.2.a) Although the attending physician is ultimately responsible for the care of the patient, other healthcare providers, including the pharmacists, shares in the responsibility and accountability for their efforts in the provision of care. Effective programs, in partnership with their Sponsoring Institutions, define, widely communicate, and monitor a structured chain of responsibility and accountability as it relates to the supervision of all patient care.

Supervision in the setting of Graduate Pharmacy Education provides safe and effective care to patients; ensures each resident's development of the skills, knowledge, and attitudes required to enter the unsupervised practice of clinical pharmacy; and establishes a foundation for continued professional growth.

VI.A.2.a)(1) Each patient care unit must have an identifiable and appropriately-credentialed and privileged clinical pharmacist who is responsible and accountable for the patient's care. <sup>(Core)</sup>

VI.A.2.a)(1)(a) This information must be available to residents, faculty members, other members of the health care team, and patients. <sup>(Core)</sup>

VI.A.2.a)(1)(b) Residents and faculty members must inform each patient of their respective roles in that patient's care when providing direct patient care. <sup>(Core)</sup>

VI.A.2.b) Supervision may be exercised through a variety of methods. For many aspects of patient care, the supervising clinical pharmacist may be a more advanced resident or fellow. Other portions of care provided by the resident can be adequately supervised by the appropriate availability of the supervising faculty member, fellow, or senior resident pharmacist, either on site or by means of telecommunication technology. Some activities require the physical presence of the supervising faculty member. In some circumstances, supervision may include post-hoc review of resident-delivered care with feedback.

VI.A.2.b)(1) The program must demonstrate that the appropriate level of supervision in place for all residents is based on each resident's level of training and ability, as well as patient complexity and acuity. Supervision may be exercised through a variety of methods, as appropriate to the situation. <sup>(Core)</sup>

VI.A.2.b)(2) The program must define when the physical presence of a supervising physician is required. <sup>(Core)</sup>

#### VI.A.2.c) Levels of Supervision

To promote appropriate resident supervision while providing for graded authority and responsibility, the program must use the following classification of supervision: <sup>(Core)</sup>

VI.A.2.c)(1) Direct Supervision: the supervising faculty is physically present with the resident during the key portions of the patient interaction. <sup>(Core)</sup>

Residents must initially be supervised directly. <sup>(Core)</sup>

VI.A.2.c)(1)(a) The program must have clear guidelines that delineate which competencies must be demonstrated to determine when a resident can progress to indirect supervision. <sup>(Core)</sup>

VI.A.2.c)(1)(b) The program director must ensure that clear expectations exist and are communicated to the residents, and that these expectations outline specific situations in which a resident would still require direct supervision. <sup>(Core)</sup>

VI.A.2.c)(2) Indirect Supervision: the supervising faculty is not providing physical or concurrent visual or audio supervision but is immediately available to the resident for guidance and is available to provide appropriate direct supervision. <sup>(Core)</sup>

VI.A.2.c)(3) Oversight: the supervising faculty is available to provide review of performance/activity with feedback provided after care is delivered. <sup>(Core)</sup>

VI.A.2.d) The privilege of progressive authority and responsibility, conditional independence, and a supervisory role in patient care delegated to each resident must be assigned by the program director and faculty members. <sup>(Core)</sup>

VI.A.2.d)(1) The program director must evaluate each resident's abilities based on specific criteria. <sup>(Core)</sup>

VI.A.2.d)(2) Faculty members functioning as supervisors must delegate portions of care to residents based on the needs of the patient and the skills of each resident. <sup>(Core)</sup>

VI.A.2.d)(3) Senior residents or fellows should serve in a supervisory role to junior residents in recognition of their progress toward independence, based on the needs of each patient and the skills of the individual resident or fellow. <sup>(Detail)</sup>

VI.A.2.e) Programs must set guidelines for circumstances and events in which residents must communicate with the supervising faculty member(s). <sup>(Core)</sup>

VI.A.2.e)(1) Each resident must know the limits of their scope of authority, and the circumstances under which the resident is permitted to act with conditional independence.  
(Outcome)

VI.A.2.f) Faculty supervision assignments must be of sufficient duration to assess the knowledge and skills of each resident and to delegate to the resident the appropriate level of patient care authority and responsibility. (Core)

## VI.B. Professionalism

VI.B.1. Programs, in partnership with their Sponsoring Institutions, must educate residents and faculty members concerning the professional responsibilities of clinical pharmacists, including their obligation to be appropriately rested and fit to provide the care required by their patients.  
(Core)

VI.B.2. The learning objectives of the program must:

VI.B.2.a) be accomplished through an appropriate blend of supervised patient care responsibilities, clinical teaching, and didactic educational events; (Core)

VI.B.2.b) be accomplished without excessive reliance on residents to fulfill non- clinical pharmacy obligations; (Core)

VI.B.2.c) ensure manageable patient care responsibilities. (Core)

VI.B.3. The program director, in partnership with the Sponsoring Institution, must provide a culture of professionalism that supports patient safety and personal responsibility. (Core)

VI.B.4. Residents and faculty members must demonstrate an understanding of their personal role in the:

VI.B.4.a) provision of patient- and family-centered care; (Outcome)

VI.B.4.b) safety and welfare of patients entrusted to their care, including the ability to report unsafe conditions and adverse events; (Outcome)

**Background and Intent:** *This requirement emphasizes that responsibility for reporting unsafe conditions and adverse events is shared by all members of the team and is not solely the responsibility of the resident.*

VI.B.4.c) assurance of their fitness for work, including: (Outcome)

VI.B.4.c)(1) management of their time before, during, and after clinical assignments; (Outcome)

VI.B.4.c)(2) recognition of impairment, including from illness, fatigue, and substance use, in themselves, their peers, and other members of the health care team. (Outcome)

VI.B.4.d) commitment to lifelong learning; (Outcome)

VI.B.4.e) monitoring of their patient care performance improvement indicators; (Outcome)

VI.B.5. All residents and faculty members must demonstrate responsiveness to patient needs that supersedes self-interest. This includes the recognition that under certain circumstances, the best interests of the patient may be served by transitioning that patient's care to another qualified and rested provider. (Outcome)

VI.B.6. Programs, in partnership with their Sponsoring Institutions, must provide a professional, equitable, respectful, and civil environment that is free from discrimination, sexual and other forms of harassment, mistreatment, abuse, or coercion of students, residents, faculty, and staff. (Core)

VI.B.7. Programs, in partnership with their Sponsoring Institutions, should have a process for education of residents and faculty regarding unprofessional behavior and a confidential process for reporting, investigating, and addressing such concerns. (Core)

## **VI.C. Well-Being**

Residency program directors and faculty have the professional responsibility to provide residents with a sound training program that must be planned, scheduled and balanced with concerns for patients' safety and residents' well-being. Therefore, programs must comply with the requirements outlined in this policy to ensure optimal clinical experience and education for their program's residents.

### **VI.C.1. Well-Being and Resilience**

Residents are at an increased risk for burnout and depression due to the nature of the healthcare environment and psychological, emotional, and physical well-being are critical in the development of the competent, caring, and resilient pharmacist.

VI.C.1.a) As part of the development of the resident, it is the responsibility of the pharmacy leaders to ensure residents are educated on wellness and resilience, including education on burnout syndrome, the risks, and mitigation strategies as part of the orientation to the residency. (Core)

VI.C.1.b) It is also the responsibility of pharmacy leaders to ensure faculty are educated on burnout syndrome, including the risks and mitigation strategies, in order to help identify and provide resources for at-risk residents, and to recognize when it may be in the best interest of patients to transition care to another qualified, rested pharmacist. <sup>(Core)</sup>

VI.C.1.c) As part of promoting a culture of wellness, pharmacy leaders must ensure that there is not excessive reliance on residents to fulfill service obligations that do not contribute to the educational value of the residency program or that may compromise residents' fitness for duty and endanger patient safety. However, as members of the healthcare team, residents may be required to participate in departmental coverage in times of unusual circumstances/state of emergency situations (e.g., mass-casualty, downtime, and natural disasters, pandemic) that go beyond the designated duty hours for a limited timeframe. <sup>(Core)</sup>

## **VI.D. Fatigue Mitigation**

VI.D.1. Programs must:

VI.D.1.a) educate all faculty members and residents to recognize the signs of fatigue and sleep deprivation; <sup>(Core)</sup>

VI.D.1.b) educate all faculty members and residents in alertness management and fatigue mitigation processes; <sup>(Core)</sup>

VI.D.1.c) encourage residents to use fatigue mitigation processes to manage the potential negative effects of fatigue on patient care and learning. <sup>(Detail)</sup>

VI.D.2. Each program must ensure continuity of patient care, consistent with the program's policies and procedures, if a resident may be unable to perform their patient care responsibilities due to excessive fatigue. <sup>(Core)</sup>

VI.D.3. The program, in partnership with its Sponsoring Institution, must ensure adequate sleep facilities and safe transportation options for residents who may be too fatigued to safely return home. <sup>(Core)</sup>

## **VI.E. Clinical Responsibilities, Teamwork, and Transitions of Care**

VI.E.1. Clinical Responsibilities

The clinical responsibilities for each resident must be based on PGY1 level, patient safety, resident ability, severity and complexity of patient illness/condition, and available support services. <sup>(Core)</sup>



## VI.E.2. Teamwork

Residents must care for patients in an environment that maximizes communication. This must include the opportunity to work as a member of effective interprofessional teams that are appropriate to the delivery of care in the specialty and larger health system. <sup>(Core)</sup>

## VI.E.3. Transitions of Care

VI.E.3.a) Programs must design clinical assignments to optimize transitions in patient care, including their safety, frequency, and structure. <sup>(Core)</sup>

VI.E.3.b) Programs, in partnership with their Sponsoring Institutions, must ensure and monitor effective, structured hand-over processes to facilitate both continuity of care and patient safety. <sup>(Core)</sup>

VI.E.3.c) Programs must ensure that residents are competent in communicating with team members in the hand-over process. <sup>(Outcome)</sup>

VI.E.3.d) Each program must ensure continuity of patient care, consistent with the program's policies and procedures, if a resident may be unable to perform their patient care responsibilities due to excessive fatigue or illness, or family emergency. <sup>(Core)</sup>

## **VI.F. Clinical Experience and Education**

### VI.F.1. Duty Hour Requirements

VI.F.1.a) Duty hours:

Defined as all hours spent on scheduled clinical and academic activities, regardless of setting, related to the pharmacy residency program that are required to meet the educational goals and objectives of the program.

VI.F.1.a)(1). Duty hours includes: inpatient and outpatient patient care (resident providing care within a facility, a patient's home, or from the resident's home when activities are assigned to be completed virtually); staffing/service commitment; in-house call; administrative duties; work from home activities (i.e., taking calls from home and utilizing electronic health record related to at-home call program); and scheduled and assigned activities, such as conferences, committee meetings, classroom time associated with a master's degree for applicable programs

or other required teaching activities and health and wellness events that are required to meet the goals and objectives of the residency program. <sup>(Core)</sup>

VI.F.1.a)(2). Duty hours excludes reading, studying, and academic preparation time (e.g., presentations, journal clubs, closing knowledge gaps); travel time (e.g., to and from work, conferences); and hours that are not scheduled by the residency program director or a preceptor. <sup>(Core)</sup>

#### VI.F.1.b) Maximum Hours of Work per Week

VI.F.1.b)(1) Duty hours must be limited to no more than 80 hours per week, averaged over a four-week period, inclusive of internal and external moonlighting. <sup>(Core)</sup>

#### VI.F.1.c) Mandatory Duty-Free Times

VI.F.1.c)(1) Residents must have a minimum of one day in seven days free of duty (when averaged over four weeks). At-home calls cannot be assigned on these free days. <sup>(Core)</sup>

VI.F.1.c)(2) Residents must have at minimum of 8 hours between scheduled duty periods. <sup>(Core)</sup>

VI.F.1.d) Continuous duty is defined as assigned duty periods without breaks for strategic napping or resting to reduce fatigue or sleep deprivation.

VI.F.1.d)(1) Continuous duty periods for residents should not exceed 16 hours. <sup>(Core)</sup>

VI.F.1.d)(2) If a program exceeds 16 hours of continuous duty periods, the "In House Call Program" limitations apply as described in the corresponding section. <sup>(Core)</sup>

#### VI.F.1.e) Tracking of Compliance with Duty Hours

VI.F.1.e)(1) Programs must have a method in place to track compliance with the Duty Hour Requirements for Pharmacy Residencies Policy. <sup>(Core)</sup>

VI.F.1.e)(1)(a) The documentation method used must allow the reviewer to determine compliance with all requirements outlined in this policy including hours worked, hours free of work, and frequency of all call programs. (e.g., attestation of compliance by the resident, hours worked). <sup>(Core)</sup>

VI.F.1.e)(2) Review of tracking method must be completed on a monthly basis. <sup>(Core)</sup>

VI.F.1.e)(3) Any instances of non-compliance with this policy identified should be assessed and actions taken, as needed, to avoid future instances of non-compliance. <sup>(Core)</sup>

#### VI.F.2. Moonlighting

Residents are not permitted to moonlight. <sup>(Core)</sup>

#### VI.F.3. Call Programs

If the program implements any type of on-call program (i.e., in-house, at home), there must be a documented structured process that includes:

VI.F.3.a) Level of supervision a resident will be provided based on the activities the resident is expected to perform during the on-call period, the level of resident training (i.e., PGY1 versus PGY2) and timing during the residency year. <sup>(Core)</sup>

VI.F.3.b) Identification of a backup system if the resident needs assistance to complete the responsibilities required of the on-call program. <sup>(Core)</sup>

VI.F.3.c) Method of evaluating the impact of the call program to ensure there is not a negative effect on patient care or residents' learning due to sleep deprivation or serious fatigue. <sup>(Core)</sup>

VI.F.3.d) Hours worked with in-house on-call programs and hours that meet the criteria below for at-home or other call programs must be included in the tracking of hours. <sup>(Core)</sup>

VI.F.3.e) A plan for how to proceed if residents' participation in the call program affects their performance during duty hours. <sup>(Core)</sup>

#### VI.F.3.f) In-House Call Program

VI.F.3.f)(1) Residents must not be scheduled for in-house calls more frequently than every third night averaged over a four-week period. <sup>(Core)</sup>

VI.F.3.f)(2) The maximum allowable duty assignment must not exceed 24 hours even with built in strategic napping or other strategies to reduce fatigue and sleep deprivation. <sup>(Core)</sup>

VI.F.3.f)(2)(a) Strategic napping is defined as short sleep periods, taken as a component of fatigue

management, which can mitigate the adverse effects of sleep loss. <sup>(Core)</sup>

VI.F.3.f)(3) Programs that have in-house call programs with continuous duty hours beyond 16 hours, and up to 24 hours, must document how the program will support strategic napping or other strategies for fatigue and sleep deprivation management. d. Residents must have at least 14 hours free of duty after the 24 hours of in-house hours. <sup>(Core)</sup>

#### VI.F.3.g) At-Home or Other Call Programs

VI.F.3.g)(1) At-home call must not be so frequent or taxing as to preclude rest or reasonable personal time for each resident. <sup>(Core)</sup>

VI.F.3.g)(2) The frequency of at-home calls must satisfy the requirement for one-day-in-seven free of duty, when averaged over four weeks. No at-home call can occur on the day free of duty. <sup>(Core)</sup>

VI.F.3.g)(3) At-home or other call hours are included in the maximum of 80 hours a week calculation and included in the tracking of hours only if they meet the following criteria: <sup>(Core)</sup>

VI.F.3.g)(3)(a) If a resident is called into the hospital/organization from at-home or other call program, the time spent in the hospital/organization by the resident must count towards the 80-hour maximum weekly hour limit. <sup>(Core)</sup>

VI.F.3.g)(3)(b) Only the time spent by the resident on on-call related work activities during their assigned on call hours, taking calls from home and utilizing electronic health record related to at-home call, count towards the 80 hour maximum weekly hour limit. <sup>(Core)</sup>

\*Core Requirements: Statements that define structure, resource, or process elements essential to every Graduate Pharmacy Educational Program.

†Detail Requirements: Statements that describe a specific structure, resource, or process, for achieving compliance with a Core Requirement. Programs and sponsoring

institutions in substantial compliance with the Outcome Requirements may utilize alternative or innovative approaches to meet Core Requirements.

‡Outcome Requirements: Statements that specify expected measurable or observable attributes (knowledge, abilities, skills, or attitudes) of residents or fellows at key stages of their Graduate Pharmacy Education.

## References

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4. American College of Clinical Pharmacy, clinical pharmacist, competencies. (Pharmacotherapy 2017;37(5):630–636) doi: 10.1002/phar.1923
5. <https://www.ashp.org/-/media/assets/professional-development/residencies/docs/duty-hour-requirements.ashx>
6. ASHP Accreditation Standard for Postgraduate Residency Programs

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