NATIONAL INSTITUTE FOR HEALTH SPECIALITIES

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. (Core)

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. (Core)

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. (Core)

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. (Core)

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

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

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

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

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

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

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

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

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. (Core)

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. (Core)

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

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. (Core)

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. (Core)

I.D. Resources

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

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 (Core):

I.D.2.a) access to food while on duty; (Core)

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

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; (Core)

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

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. (Core)

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

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). (Core)

I.D.5.a) Pharmacist Executive

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

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; (Core)

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

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

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; (Core)

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

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

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. (Core)

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): (Core)

I.D.5.d)(1) a pharmacy mission statement; (Core)

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

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

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

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

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

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

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

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; (Core)

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

I.D.5.e)(3) current international practice standards and guidelines. (Core)

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); (Core)

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

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

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

I.D.5.f)(5) an extemporaneous compounding service; (Core)

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

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); (Core)

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

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

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

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

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; (Core)

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

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

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

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

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

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; (Core)

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); (Core)

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; (Core)

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

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

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

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

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

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

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

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

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

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). (Core)

The pharmacy's:

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

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; (Core)

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

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. (Core)

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 program director and the pharmacy residency advisory committee. (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 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. (Core)

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; (Core)

***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. (Core)

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

***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. (Core)

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; (Core)

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; (Core)

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

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

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; (Core)

II.A.4.a)(3) administer and maintain a learning environment conducive to educating the residents. in the Competency domains; (Core)

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; (Core)

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

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

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

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; (Core)

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; (Core)

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. (Core)

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); (Core)

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; (Core)

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

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; (Core)

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; (Core)

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

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; (Core)

II.A.4.a)(15) organize and lead the Residency Advisory Committee that provides guidance for residency program conduct and related issues; (Core)

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

II.A.4.a)(17) foster continuous residency program improvement in conjunction with the residency advisory committee; (Core)

II.A.4.a)(18) work with pharmacy administration. (Core)

II.B. Faculty

Faculty members are a foundational element of Graduate Pharmacy Education – faculty members teach residents how to care for patients. Faculty members 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. (Core)

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

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; (Core)

II.B.2.b) demonstrate the ability to assess residents' performance; (Core)

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

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

II.B.2.e) maintenance of continuity of practice during the time of residents' learning experiences; (Core)

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

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

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; (Core)

II.B.2.i) pursue faculty development designed to enhance their skills at least annually: (Core)

II.B.2.i)(1) as educators; (Core)

II.B.2.i)(2) in quality improvement and patient safety; (Core)

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

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

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

II.B.3. Faculty Qualifications

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

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

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

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

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 5 or more years of clinical pharmacy practice experience. (Core)

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: (Core)

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

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

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. (Core)

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; (Core)

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. (Core)

II.C. Program Coordinator

II.C.1. There must be a program coordinator. (Core)

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

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. (Core)

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: (Core)

III.A.1.a) Refer to NIHS criteria included in the Training Bylaw.

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. (Core)

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. (Core)

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. (Core)

III.A.2.c) Applicants to pharmacy residencies should be graduates of an accredited pharmacy degree program. "At a minimum, the program must be a five-year pharmacy degree program." (Core)

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. (Core)

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

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. (Core)

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

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. (Core)

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. (Core)

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. (Core)

III.B. Number of Residents

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

III.B.2. All changes in resident complement must be approved by the NIHS Central Accreditation Committee. (Core)

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

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. (Core)

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: (Core)

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. (Core)

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

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

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

IV.A.5. A broad range of structured didactic activities. (Core)

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

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.

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

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. (Core)

IV.B. Clinical Pharmacist Competencies

IV.B.1. The program must integrate the following Specific clinical pharmacist competency areas, goals, and objectives described herein into the curriculum. (Core)

IV.B.1.a) Each of the goals encompassed by the program's selected program competency areas must be evaluated at least once during the residency. (Core)

IV.B.1.b) In addition, elective competency areas may be selected for specific residents only. (Detail)

IV.B.2. Patient Care

IV.B.2.a) In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process. (Core)

IV.B.2.a)(1) Interact effectively with health care teams to manage patients' medication therapy. (Core)

IV.B.2.a)(1)(a) Interactions are cooperative, collaborative, communicative, and respectful; (Core)

IV.B.2.a)(1)(b) Demonstrates skills in negotiation, conflict management, and consensus building; (Core)

IV.B.2.a)(1)(c) Demonstrates advocacy for the patient. (Core)

IV.B.2.a)(2) Interact effectively with patients, family members, and caregivers. (Core)

IV.B.2.a)(2)(a) Interactions are respectful and collaborative. (Core)

IV.B.2.a)(2)(b) Uses effective communication skills. (Core)

IV.B.2.a)(2)(c) Shows empathy. (Core)

IV.B.2.a)(2)(d) Empowers patients to take responsibility for their health. (Core)

IV.B.2.a)(2)(e) Demonstrates cultural competence. (Core)

IV.B.2.a)(3) Collect information on which to base safe and effective medication therapy. (Core)

IV.B.2.a)(3)(a) Collection/organization methods are efficient and effective. (Core)

IV.B.2.a)(3)(b) Collects relevant information about medication therapy, including: (Core)

- History of present illness.
- Relevant health data that may include past medical history, health and wellness information, biometric test results, and physical assessment findings.
- Social history.
- Medication history, including prescription, non-prescription, illicit, recreational, and nontraditional therapies; other dietary supplements, immunizations, and allergies.
- Laboratory values.
- Pharmacogenomics and pharmacogenetic information, if available.
- Adverse drug reactions.
- Medication adherence and persistence.
- Patient lifestyle habits, preferences and beliefs, health and functional goals, and socioeconomic factors that affect access to medications and other aspects of care.

IV.B.2.a)(3)(c) Sources of information are the most reliable available, including electronic, face-to-face, and others. (Core)

IV.B.2.a)(3)(d) Recording system is functional for subsequent problem solving and decision making. (Core)

IV.B.2.a)(3)(e) Clarifies information as needed. (Core)

IV.B.2.a)(3)(f) Displays understanding of limitations of information in health records. (Core)

IV.B.2.a)(4) Analyze and assess information on which to base safe and effective medication therapy. (Core)

IV.B.2.a)(4)(a) Includes accurate assessment of patient's: (Core)

- Health and functional status.
- Risk factors.
- Health data.
- Cultural factors.
- Health literacy.

- Access to medications.
- Immunization status.
- Need for preventive care and other services, when appropriate.
- Other aspects of care, as applicable.

IV.B.2.a)(4)(b) Identifies medication therapy problems, including: (Core)

- Lack of indication for medication.
- Medical conditions for which there is no medication prescribed.
- Medication prescribed or continued inappropriately for a particular medical condition.
- Suboptimal medication regimen (e.g., dose, dosage form, duration, schedule, route of administration, method of administration).
- Therapeutic duplication.
- Adverse drug or device-related events or the potential for such events.
- Clinically significant drug–drug, drug–disease, drug–nutrient, drug–DNA test interaction, drug–laboratory test interaction, or the potential for such interactions.
- Use of harmful social, recreational, nonprescription, nontraditional, or other medication therapies.
- Patients not receiving full benefit of prescribed medication therapy.
- Problems arising from the financial impact of medication therapy on the patient.
- Patient lacks understanding of medication therapy.
- Patient not adhering to medication regimen and root cause (e.g., knowledge, recall, motivation, financial, system).
- Laboratory monitoring needed.
- Discrepancy between prescribed medications and established care plan for the patient.

IV.B.2.a)(5) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans). (Core)

IV.B.2.a)(5)(a) Specifies evidence-based, measurable, achievable therapeutic goals that include consideration of: (Core)

- Relevant patient-specific information, including culture and preferences.
- The goals of other interprofessional team members.
- The patient's disease state(s).
- Medication-specific information.
- Best evidence.
- Ethical issues involved in the patient's care.
- Quality-of-life issues specific to the patient.
- Integration of all the above factors influencing the setting of goals.

IV.B.2.a)(5)(a) Designs/redesigns regimens that: (Core)

- Are appropriate for the disease states being treated.
- Reflect:
    - The therapeutic goals established for the patient.
    - The patient's and caregiver's specific needs.
    - Consideration of:
        • Any pertinent pharmacogenomic or pharmacogenetic factors.
        • Best evidence.
        • Pertinent ethical issues.
        • Pharmacoeconomic components (patient, medical, and systems resources).
        • Patient preferences, culture, and/or language differences.

IV.B.2.a)(5)(b) Patient-specific factors, including physical, mental, emotional, and financial factors that might impact adherence to the regimen. (Core)

- Adhere to the health system's medication-use policies.
- Follow applicable ethical standards.
- Address wellness promotion and lifestyle modification.
- Support the organization or patient's formulary.

- Address medication-related problems and optimize medication therapy.
- Engage the patient through education, empowerment, and promotion of self-management.

IV.B.2.a)(5)(c) Designs/redesigns monitoring plans that: (Core)

- Effectively evaluate achievement of therapeutic goals.
- Ensure adequate, appropriate, and timely follow-up.
- Establish parameters that are appropriate measures of therapeutic goal achievement.
- Reflect consideration of best evidence.
- Select the most reliable source for each parameter measurement.
- Have appropriate value ranges selected for the patient.
- Have parameters that measure efficacy.
- Have parameters that measure potential adverse drug events.
- Have parameters that are cost-effective. o Have obtainable measurements of the parameters specified.
- Reflects consideration of compliance.
- If for an ambulatory patient, includes strategy for ensuring patient returns for needed follow-up visit(s).
- When applicable, reflects preferences and needs of the patient.

IV.B.2.a)(6) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions. (Core)

IV.B.2.a)(6)(a) Effectively recommends or communicates patients' regimens and associated monitoring plans to relevant members of the health care team. (Core)

- Recommendation is persuasive.
- Presentation of recommendation accords patient's right to refuse treatment.

- If a patient refuses treatment, pharmacist exhibits responsible professional behavior.
- Creates an atmosphere of collaboration.
- Skillfully defuses negative reactions.
- Communication conveys expertise.
- Communication is assertive but not aggressive.
- Where the patient has been directly involved in the design of the plans, communication reflects previous collaboration appropriately.

IV.B.2.a)(6)(b) Ensures recommended plan is implemented effectively for the patient, including ensuring that the: (Core)

- Therapy corresponds with the recommended regimen.
- Regimen is initiated at the appropriate time.
- Medication orders are clear and concise.
- Activity complies with the health system's policies and procedures.
- Tests correspond with the recommended monitoring plan.
- Tests are ordered and performed at the appropriate time.

IV.B.2.a)(6)(c) Takes appropriate action based on analysis of monitoring results (redesign regimen and/or monitoring plan if needed). (Core)

IV.B.2.a)(6)(d) Appropriately initiates, modifies, discontinues, or administers medication therapy as authorized. (Core)

IV.B.2.a)(6)(e) Responds appropriately to notifications and alerts in electronic medical records and other information systems that support medication ordering processes (based on factors such as patient weight, age, gender, comorbid conditions, drug interactions, renal function, and hepatic function). (Core)

IV.B.2.a)(6)(f) Provides thorough and accurate education to patients and caregivers, when appropriate, including information on medication therapy, adverse effects, compliance, appropriate use, handling, and medication administration. (Core)

IV.B.2.a)(6)(g) Addresses medication- and health-related problems and engages in preventive care strategies, including vaccine administration. (Core)

IV.B.2.a)(6)(h) Schedules follow-up care as needed to achieve goals of therapy. (Core)

IV.B.2.a)(7) Document direct patient care activities appropriately in the medical record or where appropriate. (Core)

IV.B.2.a)(7)(a) Selects appropriate direct patient care activities for documentation. (Core)

IV.B.2.a)(7)(b) Documentation is clear. (Core)

IV.B.2.a)(7)(c) Documentation is written in time to be useful. (Core)

IV.B.2.a)(7)(d) Documentation follows the health system's policies and procedures, including requirements that entries be signed, dated, timed, legible, and concise. (Core)

IV.B.2.a)(8) Demonstrate responsibility to patients. (Core)

IV.B.2.a)(8)(a) Gives priority to patient care activities. (Core)

IV.B.2.a)(8)(b) Plans prospectively. (Core)

IV.B.2.a)(8)(c) Routinely completes all steps of the medication management process. (Core)

IV.B.2.a)(8)(d) Assumes responsibility for medication therapy outcomes. (Core)

IV.B.2.a)(8)(e) Actively works to identify the potential for significant medication-related problems. (Core)

IV.B.2.a)(8)(f) Actively pursues all significant existing and potential medication-related problems until satisfactory resolution is obtained. (Core)

IV.B.2.a)(8)(g) Helps patients learn to navigate the health care system, as appropriate. (Core)

IV.B.2.a)(8)(h) Informs patients how to obtain their medications in a safe, efficient, and cost-effective manner. (Core)

IV.B.2.a)(8)(i) Determines barriers to patient compliance and makes appropriate adjustments. (Core)

IV.B.2.b) Ensure continuity of care during patient transitions between care settings. (Core)

IV.B.2.b)(1) Manage transitions of care effectively. (Core)

IV.B.2.b)(1)(a) Effectively participates in obtaining or validating a thorough and accurate medication history. (Core)

IV.B.2.b)(1)(b) Conducts medication reconciliation when necessary. (Core)

IV.B.2.b)(1)(c) Participates in thorough medication reconciliation. (Core)

IV.B.2.b)(1)(d) Follows up on all identified drug-related problems. (Core)

IV.B.2.b)(1)(e) Participates effectively in medication education. (Core)

IV.B.2.b)(1)(f) Provides accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider, as appropriate. (Core)

IV.B.2.b)(1)(g) Follows up with patient in a timely and caring manner. (Core)

IV.B.2.b)(1)(h) Provides additional effective monitoring and education, as appropriate. (Core)

IV.B.2.b)(1)(i) Takes appropriate and effective steps to help avoid unnecessary hospital admissions and/or readmissions. (Core)

IV.B.2.c) Prepare, dispense, and manage medications to support safe and effective drug therapy for patients. (Core)

IV.B.2.c)(1) Prepare and dispense medications following best practices and the organization's policies and procedures. (Core)

IV.B.2.c)(1)(a) Correctly interprets appropriateness of a medication order before preparing or

permitting the distribution of the first dose, including: (Core)

- Identifying, clarifying, verifying, and correcting any medication order errors.
- Considering complete patient-specific information.
- Identifying existing or potential drug therapy problems.
- Determining an appropriate solution to an identified problem.
- Securing consensus from the prescriber for modifications to therapy.
- Ensuring that the solution is implemented.

IV.B.2.c)(1)(b) Prepares medication using appropriate techniques and following the organization's policies and procedures and applicable professional standards, including: (Core)

- When required, accurately calibrate equipment.
- Ensuring that solutions are appropriately concentrated, without incompatibilities; stable; and appropriately stored.
- Adhering to appropriate safety and quality assurance practices.
- Preparing labels that conform to the health system's policies and procedures.
- Ensuring that medication has all necessary and appropriate ancillary labels.
- Inspecting the final medication before dispensing.

IV.B.2.c)(1)(c) When dispensing medication products: (Core)

- Follows the organization's policies and procedures.
- Ensures the patient receives the medication(s) as ordered.
- Ensures the integrity of medication dispensed.
- Provides any necessary written and/or verbal counseling.
- Ensures the patient receives medication on time.

IV.B.2.c)(1)(d) Maintains accuracy and confidentiality of patients' protected health information. (Core)

IV.B.2.c)(1)(e) Obtains agreement on modifications to medication orders when acting in the absence of, or outside, an approved protocol or collaborative agreement. (Core)

IV.B.2.c)(2) Manage aspects of the medication-use process related to formulary management. (Core)

IV.B.2.c)(2)(a) Follows appropriate procedures regarding exceptions to the formulary, if applicable, in compliance with policy. (Core)

IV.B.2.c)(2)(b) Ensures non-formulary medications are dispensed, administered, and monitored in a manner that ensures patient safety. (Core)

IV.B.2.c)(3) Manage aspects of the medication-use process related to oversight of dispensing. (Core)

IV.B.2.c)(3)(a) When appropriate, follow the organization's established protocols. (Core)

IV.B.2.c)(3)(b) Makes effective use of relevant technology to aid in decision-making and increase safety. (Core)

IV.B.2.c)(3)(c) Demonstrates commitment to medication safety in medication-use processes. (Core)

IV.B.2.c)(3)(d) Effectively prioritizes workload and organizes workflow. (Core)

IV.B.2.c)(3)(e) Checks accuracy of medications dispensed, including correct patient identification, medication, dosage form, label, dose, number of doses, and expiration dates and proper repackaging and relabeling medications, including compounded medications (sterile and nonsterile). (Core)

IV.B.2.c)(3)(f) Checks the accuracy of the work of pharmacy technicians, clerical personnel, pharmacy students, and others according to applicable laws and institutional policies. (Core)

IV.B.2.c)(3)(g) Promotes safe and effective drug use on a day-to-day basis. (Core)

IV.B.3. Advancing Practice and Improving Patient Care

IV.B.3.a) Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization. (Core)

IV.B.3.a)(1) Prepare a drug class review, monograph, treatment guideline, or protocol. (Core)

IV.B.3.a)(1)(a) Displays objectivity. (Core)

IV.B.3.a)(1)(b) Effectively synthesizes information from the available literature. (Core)

IV.B.3.a)(1)(c) Applies evidenced-based principles. (Core)

IV.B.3.a)(1)(d) Consults relevant sources. (Core)

IV.B.3.a)(1)(e) Considers medication-use safety and resource utilization. (Core)

IV.B.3.a)(1)(f) Uses the appropriate format. (Core)

IV.B.3.a)(1)(g) Effectively communicates any changes in medication formulary, medication usage, or other procedures to appropriate parties. (Core)

IV.B.3.a)(1)(h) Demonstrates appropriate assertiveness in presenting pharmacy concerns, solutions, and interests to internal and external stakeholders. (Core)

IV.B.3.a)(2) Participate in a medication-use evaluation. (Core)

IV.B.3.a)(2)(a) Uses evidence-based principles to develop criteria for use. (Core)

IV.B.3.a)(2)(b) Demonstrates a systematic approach to gathering data. (Core)

IV.B.3.a)(2)(c) Accurately analyzes data gathered. (Core)

IV.B.3.a)(2)(d) Demonstrates appropriate assertiveness in presenting pharmacy concerns, solutions, and interests to internal and external stakeholders. (Core)

IV.B.3.a)(2)(e) Implements approved changes, as applicable. (Core)

IV.B.3.a)(3) Identify opportunities for improvement of the medication-use system. (Core)

IV.B.3.a)(3)(a) Appropriately identifies problems and opportunities for improvement and analyzes relevant background data. (Core)

IV.B.3.a)(3)(b) Accurately evaluates or assists in the evaluation of data generated by health information technology or automated systems to identify opportunities for improvement. (Core)

IV.B.3.a)(3)(c) Uses best practices to identify opportunities for improvements. (Core)

IV.B.3.a)(3)(d) When needed, makes medication-use policy recommendations based on a review of practice standards and other evidence (e.g., Joint Commission sentinel alerts). (Core)

IV.B.3.a)(3)(e) Demonstrates appropriate assertiveness in presenting pharmacy concerns, solutions, and interests to internal and external stakeholders. (Core)

IV.B.3.a)(4) Participate in medication event reporting and monitoring. (Core)

IV.B.3.a)(4)(a) Effectively uses currently available technology and automation that supports a safe medication-use process. (Core)

IV.B.3.a)(4)(b) Appropriately and accurately determines, investigates, reports, tracks, and trends adverse drug events, medication errors, and efficacy concerns using accepted institutional resources and programs. (Core)

IV.B.3.b) Demonstrate ability to evaluate and investigate practice, review data, and assimilate scientific evidence to improve patient care and/or the medication-use system. (Core)

Background and intent: *Ideally, competencies cited at IV.B.3.b)(1) - IV.B.3.b)(5) will be addressed through residents working on one quality improvement or research project; however, if this is not possible, all objectives must be addressed by the end of the residency and can be addressed through work on more than one initiative.*

IV.B.3.b)(1) Identify changes needed to improve patient care and/or the medication use system. (Core)

IV.B.3.b)(1)(a) Appropriately identifies problems and opportunities for improvement and analyzes relevant background data. (Core)

IV.B.3.b)(1)(b) Determines an appropriate topic for a practice-related project of significance to patient care. (Core)

IV.B.3.b)(1)(c) Uses best practices or evidence-based principles to identify opportunities for improvements. (Core)

IV.B.3.b)(1)(d) Accurately evaluates or assists in the evaluation of data generated by health information technology or automated systems to identify opportunities for improvement. (Core)

IV.B.3.b)(2) Develop a plan to improve patient care and/or the medication-use system. (Core)

IV.B.3.b)(2)(a) Steps in plan are defined clearly. (Core)

IV.B.3.b)(2)(b) Applies safety design practices (e.g., standardization, simplification, human factors training, lean principles, FOCUS-PDCA, other process improvement or research methodologies) appropriately and accurately. (Core)

IV.B.3.b)(2)(c) Plan for improvement includes appropriate reviews and approvals required by department or organization and addresses the concerns of all stakeholders. (Core)

IV.B.3.b)(2)(d) Applies evidence-based principles, if needed. (Core)

IV.B.3.b)(2)(e) Develops a sound research or quality improvement question that can be realistically addressed in the desired time frame, if appropriate. (Core)

IV.B.3.b)(2)(f) Develops a feasible design for a project that considers who or what will be affected by the project. (Core)

IV.B.3.b)(2)(g) Identifies and obtains necessary approvals for a practice-related project. (Core)

IV.B.3.b)(2)(h) Uses appropriate electronic data and information from internal information databases, external online databases, appropriate Internet resources, and other sources of decision support, as applicable. (Core)

IV.B.3.b)(2)(i) Plan design is practical to implement and is expected to remedy or minimize the identified challenge or deficiency. (Core)

IV.B.3.b)(3) Implement changes to improve patient care and/or the medication-use system. (Core)

IV.B.3.b)(3)(a) Follows established timeline and milestones. (Core)

IV.B.3.b)(3)(b) Implements the project as specified in its design. (Core)

IV.B.3.b)(3)(c) Collects data as required by project design. (Core)

IV.B.3.b)(3)(d) Effectively presents plan (e.g., accurately recommends or contributes to recommendation for operational change, formulary addition or deletion, implementation of medication guideline or restriction, or treatment protocol implementation) to appropriate audience. (Core)

IV.B.3.b)(3)(e) Plan is based on appropriate data. (Core)

IV.B.3.b)(3)(f) Gains necessary commitment and approval for implementation. (Core)

IV.B.3.b)(3)(g) Effectively communicates any changes in medication formulary, medication usage, or other procedures to appropriate parties. (Core)

IV.B.3.b)(3)(h) Demonstrates appropriate assertiveness in presenting pharmacy concerns, solutions, and interests to external stakeholders. (Core)

IV.B.3.b)(3)(i) Change is implemented fully. (Core)

IV.B.3.b)(4) Changes made to improve patient care or the medication-use system. (Core)

IV.B.3.b)(4)(a) Outcome of change is evaluated accurately and fully. (Core)

IV.B.3.b)(4)(b) Includes operational, clinical, economic, and humanistic outcomes of patient care. (Core)

IV.B.3.b)(4)(c) Uses continuous quality improvement principles to assess the success of the implemented change, if applicable. (Core)

IV.B.3.b)(4)(d) Correctly identifies need for additional modifications or changes. (Core)

IV.B.3.b)(4)(e) Accurately assesses the impact of the project, including its sustainability, if applicable. (Core)

IV.B.3.b)(4)(f) Accurately and appropriately develops plan to address opportunities for additional changes. (Core)

IV.B.3.b)(5) Effectively develop and present, orally and in writing, a final project report. (Core)

IV.B.3.b)(5)(a) Outcome of change is reported accurately to appropriate stakeholders(s) and policy-making bodies according to departmental or organizational processes. (Core)

IV.B.3.b)(5)(b) Report includes implications for changes to or improvement in pharmacy practice. (Core)

IV.B.3.b)(5)(c) Report uses an accepted manuscript style suitable for publication in professional literature. (Core)

IV.B.3.b)(5)(d) Oral presentations to appropriate audiences within the department and organization or to external audiences use effective communication and presentation skills and tools (e.g., handouts, slides) to convey points successfully. (Core)

IV.B.4. Leadership and Management

IV.B.4.a) Demonstrate leadership skills. (Core)

IV.B.4.a)(1) Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership. (Core)

IV.B.4.a)(1)(a) Demonstrates effective time management. (Core)

IV.B.4.a)(1)(b) Manages conflict effectively. (Core)

IV.B.4.a)(1)(c) Demonstrates effective negotiation skills. (Core)

IV.B.4.a)(1)(d) Demonstrates ability to lead interprofessional teams. (Core)

IV.B.4.a)(1)(e) Uses effective communication skills and styles. (Core)

IV.B.4.a)(1)(f) Demonstrates understanding of perspectives of various health care professionals. (Core)

IV.B.4.a)(1)(g) Effectively expresses benefits of personal profession-wide leadership and advocacy. (Core)

IV.B.4.a)(2) Apply a process of ongoing self-evaluation and personal performance improvement. (Core)

IV.B.4.a)(2)(a) Accurately summarizes own strengths and areas for improvement (in knowledge, values, qualities, skills, and behaviors). (Core)

IV.B.4.a)(2)(b) Effectively uses a self-evaluation process for developing professional direction, goals, and plans. (Core)

IV.B.4.a)(2)(c) Effectively engages in self-evaluation of progress on specified goals and plans. (Core)

IV.B.4.a)(2)(d) Demonstrates ability to use and incorporate constructive feedback from others. (Core)

IV.B.4.a)(2)(e) Effectively uses principles of continuous professional development planning (reflect, plan, act, evaluate, record/review). (Core)

IV.B.4.b) Demonstrate management skills. (Core)

IV.B.4.b)(1) Explain factors that influence departmental planning. (Core)

IV.B.4.b)(1)(a) Identifies and explains factors that influence departmental planning, including: (Core)

- Basic principles of management.
- Financial management.
- Accreditation, legal, regulatory, and safety requirements.
- Facilities design.
- Human resources.
- Culture of the organization.
- The organization's political and decision-making structure.

IV.B.4.b)(1)(b) Explains the potential impact of factors on departmental planning. (Core)

IV.B.4.b)(1)(c) Explains the strategic planning process. (Core)

IV.B.4.b)(2) Explain the elements of the pharmacy enterprise and their relationship to the health care system. (Core)

IV.B.4.b)(2)(a) Identifies appropriate resources to keep updated on trends and changes within pharmacy and health care. (Core)

IV.B.4.b)(2)(b) Explains changes to laws and regulations (e.g., value-based purchasing, consumer-driven health care, reimbursement models) related to medication use. (Core)

IV.B.4.b)(2)(c) Explains external quality metrics (e.g., FDA-mandated Risk Evaluation and Mitigation Strategy) and how they are developed, abstracted, reported, and used. (Core)

IV.B.4.b)(2)(d) Describes the governance of the health care system and leadership roles. (Core)

IV.B.4.b)(3) Contribute to departmental management. (Core)

IV.B.4.b)(3)(a) Helps identify and define significant departmental needs. (Core)

IV.B.4.b)(3)(b) Helps develop plans that address departmental needs. (Core)

IV.B.4.b)(3)(c) Participates effectively on committees or informal work groups to complete group projects, tasks, or goals. (Core)

IV.B.4.b)(3)(d) Participates effectively in implementing changes, using change management and quality improvement best practices and tools, consistent with team, departmental, and organizational goals. (Core)

IV.B.4.b)(4) Manage one's own practice effectively. (Core)

IV.B.4.b)(4)(a) Accurately assesses successes and areas for improvement (e.g., a need for staffing projects/education) in managing one's own practice. (Core)

IV.B.4.b)(4)(b) Makes accurate, criteria-based assessments of one's own ability to perform practice tasks. (Core)

IV.B.4.b)(4)(c) Regularly integrates new learning into subsequent performances of a task until expectations are met. (Core)

IV.B.4.b)(4)(d) Routinely seeks applicable learning opportunities when performance does not meet expectations. (Core)

IV.B.4.b)(4)(e) Demonstrates effective workload and time-management skills. (Core)

IV.B.4.b)(4)(f) Assumes responsibility for personal work quality and improvement. (Core)

IV.B.4.b)(4)(g) Is well prepared to fulfill responsibilities (e.g., patient care, projects, management, meetings). (Core)

IV.B.4.b)(4)(h) Sets and meets realistic goals and timelines. (Core)

IV.B.4.b)(4)(i) Demonstrates awareness of own values, motivations, and emotions. (Core)

IV.B.4.b)(4)(j) Demonstrates enthusiasm, self-motivation, and a "can-do" approach. (Core)

IV.B.4.b)(4)(k) Strives to maintain a healthy work–life balance. (Core)

IV.B.4.b)(4)(l) Works collaboratively within the organization's political and decision-making structure. (Core)

IV.B.4.b)(4)(m) Demonstrates pride in and commitment to the profession through appearance, personal conduct, planning to pursue board certification, and pharmacy association membership activities. (Core)

IV.B.4.b)(4)(n) Demonstrates personal commitment to and adheres to organizational and departmental policies and procedures. (Core)

IV.B.5. Teaching, Education, and Dissemination of Knowledge

IV.B.5.a) Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups).

IV.B.5.a)(1) Design effective educational activities. (Core)

IV.B.5.a)(1)(a) Accurately defines educational needs with regard to target audience (e.g., individual versus group) and learning level (e.g., health care professional versus patient). (Core)

IV.B.5.a)(1)(b) Defines educational objectives that are specific, measurable, at a relevant learning level (e.g., applying, creating, evaluating), and address the audiences' defined learning needs. (Core)

IV.B.5.a)(1)(c) Plans use of teaching strategies that match learner needs, including active learning (e.g., patient cases, polling). (Core)

IV.B.5.a)(1)(d) Selects content that is relevant, thorough, evidence based (using primary literature where appropriate), and timely and reflects best practices. (Core)

IV.B.5.a)(1)(e) Includes accurate citations and relevant references and adheres to applicable copyright laws. (Core)

IV.B.5.a)(2) Use effective presentation and teaching skills to deliver education. (Core)

IV.B.5.a)(2)(a) Demonstrates rapport with learners. (Core)

IV.B.5.a)(2)(b) Captures and maintains learner/audience interest throughout the presentation. (Core)

IV.B.5.a)(2)(c) Implements planned teaching strategies effectively. (Core)

IV.B.5.a)(2)(d) Effectively facilitates audience participation, active learning, and engagement in various settings (e.g., small or large group, distance learning). (Core)

IV.B.5.a)(2)(e) Presents at appropriate rate and volume and without exhibiting poor speaker habits. (Core)

IV.B.5.a)(2)(f) Body language, movement, and expressions enhance presentations. (Core)

IV.B.5.a)(2)(g) Summarizes important points at appropriate times throughout presentations. (Core)

IV.B.5.a)(2)(h) Transitions smoothly between concepts. (Core)

IV.B.5.a)(2)(i) Effectively uses audio-visual aids and handouts to support learning activities. (Core)

IV.B.5.a)(3) Use effective written communication to disseminate knowledge. (Core)

IV.B.5.a)(3)(a) Writes in a manner that is easily understandable and free of errors. (Core)

IV.B.5.a)(3)(b) Demonstrates thorough understanding of the topic. (Core)

IV.B.5.a)(3)(c) Notes appropriate citations and references. (Core)

IV.B.5.a)(3)(d) Includes critical evaluation of the literature and knowledge advancements or a summary of what is currently known on the topic. (Core)

IV.B.5.a)(3)(e) Develops and uses tables, graphs, and figures to enhance reader's understanding of the topic when appropriate. (Core)

IV.B.5.a)(3)(f) Writes at a level appropriate for the target readership (e.g., physicians, pharmacists, other health care professionals, patients, the public). (Core)

IV.B.5.a)(3)(g) Creates one's own work and does not engage in plagiarism. (Core)

IV.B.5.a)(4) Appropriately assess effectiveness of education. (Core)

IV.B.5.a)(4)(a) Selects assessment method (e.g., written or verbal assessment or self-assessment questions, case with case-based questions, learner demonstration of new skill) that matches activity. (Core)

IV.B.5.a)(4)(b) Provides timely, constructive, and criteria-based feedback to learner. (Core)

IV.B.5.a)(4)(c) If used, assessment questions are written in a clear, concise format that reflects best practices for test item construction.

IV.B.5.a)(4)(d) Determines how well learning objectives were met. (Core)

IV.B.5.a)(4)(e) Plans for follow-up educational activities to enhance or support learning and (if applicable) ensure that goals were met. (Core)

IV.B.5.a)(4)(f) Identifies ways to improve education-related skills. (Core)

IV.B.5.a)(4)(g) Obtains and reviews feedback from learners and others to improve effectiveness as an educator. (Core)

IV.B.5.b) Effectively employ appropriate preceptor roles when engaged in teaching students, pharmacy technicians, or fellow health care professionals. (Core)

IV.B.5.b)(1) When engaged in teaching, select a preceptor role that meets learners' educational needs. (Core)

IV.B.5.b)(1)(a) Identifies which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating). (Core)

- Selects direct instruction when learners need background content.
- Selects modeling when learners have sufficient background knowledge to understand the skill being modeled.
- Selects coaching when learners are prepared to perform a skill under supervision.
- Selects facilitating when learners have performed a skill satisfactorily under supervision.

IV.B.5.b)(2) Effectively employ preceptor roles, as appropriate. (Core)

IV.B.5.b)(2)(a) Instructs students, technicians, or others as appropriate. (Core)

IV.B.5.b)(2)(b) Models skills, including "thinking out loud," so learners can "observe" critical-thinking skills. (Core)

IV.B.5.b)(2)(c) Coaches, including effective use of verbal guidance, feedback, and questioning, as needed. (Core)

IV.B.5.b)(2)(d) Facilitates, when appropriate, by allowing learner independence and using indirect monitoring of performance. (Core)

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. (Core)

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. (Core)

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. (Core)

IV.C.2. Program Structure

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

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

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

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

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. (Core)

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. (Core)

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). (Core)

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

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

- Completing comprehensive medication reviews (i.e., thorough review of medication profiles)
- Performing drug therapy management (e.g., anticoagulation management, renal dosing, and pharmacokinetics) and participating in disease state management services.
- Collecting and organizing 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.

- Specifying 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.
- Designing patient-centered regimens and monitoring 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.
- Recommending or communicating patient-centered, evidence-based therapeutic regimens and corresponding 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.
- Initiating, when appropriate, the patient-centered, evidence-based therapeutic regimen and monitoring plan for patients according to the organization's policies and procedures.
- Assessing patients' progress toward therapeutic goal(s) and, when necessary, redesigning a patient-centered, evidence-based therapeutic plan as necessary based on evaluation of monitoring data and therapeutic outcomes.
- Performing or participating in medication reconciliation.
- Using 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.
- Patient-centered preparation and dispensing of medications for individual patients

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. (Core)

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. (Core)

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

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: (Core)

- 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; (Core)

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. (Core)

IV.D.3.b) Residents must participate in scholarly project. (Core)

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

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. (Core)

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. (Core)

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. (Core)

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. (Core)

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. (Core)

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. (Core)

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. (Core)

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. (Core)

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. (Core)

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

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

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: (Core)

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

V.A.1.d)(2) provide that information to the Residency Advisory Committee for its synthesis of progressive resident performance and improvement toward unsupervised practice. (Core)

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

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

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

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.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 specialty-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) be shared with the resident upon completion of the program. (Core)

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. (Core)

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

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. (Core)

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. (Core)

V.B.1.b) This evaluation must include written, anonymous, and confidential evaluations by the residents. (Core)

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

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

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. (Detail)

V.C. Program Evaluation and Improvement

V.C.1. The program director must establish and chair a Residency Advisory Committee (RAC) specific to that program. (Core)

V.C.1.a) The Residency Advisory Committee must include at least three members of the program faculty. (Core)

V.C.1.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. (Core)

V.C.1.a)(2) The program director has final responsibility for resident evaluation and program completion decisions. (Core)

V.C.1.b) The Residency Advisory Committee activities must include:

V.C.1.b)(1) review all residents evaluation at lease semi-annually; (Core)

V.C.1.b)(2) determine each resident's progress; (Core)

V.C.1.b)(3) meet prior to the residents' semi-annual evaluations and advise the program director regarding each resident's progress; (Core)

V.C.1.b)(4) act as an advisor to the program director, through program oversight; (Core)

V.C.1.b)(5) review of the program's requirements, both NIHS Emirati Clinical Pharmacy Board required and program self-determined goals, and the progress toward meeting them; (Core)

V.C.1.b)(6) guide ongoing program improvement, including developing new goals based upon outcomes; (Core)

V.C.1.b)(7) review of the current operating environment to identify strengths, challenges, opportunities, and threats related to the program's mission and aims. (Core)

V.C.1.c) The program director, Residency Advisory Committee 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.d) The program director or designee must develop and implement program improvement activities to respond to the results of the assessment of the residency program. (Core)

V.C.1.e) 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.e)(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.1.f) The Residency Advisory Committee should also consider the following elements in its assessment of the program:

V.C.1.f)(1) program curriculum; (Core)

V.C.1.f)(2) outcomes from prior Annual Program Evaluation(s); (Core)

V.C.1.f)(3) NIHS letters of notification including citations, areas for improvement, and comments; (Core)

V.C.1.f)(4) the quality and safety of patient care; (Core)

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

V.C.1.f)(5)(a) well-being; (Core)

V.C.1.f)(5)(b) recruitment and retention following institutional policies; (Core)

V.C.1.f)(5)(c) workforce diversity following institutional policies; (Core)

V.C.1.f)(5)(d) engagement in quality improvement and patient safety; (Core)

V.C.1.f)(5)(e) scholarly activity; (Core)

V.C.1.f)(5)(f) Resident and Faculty Surveys; (Core)

V.C.1.f)(5)(g) written evaluations of the program. (Core)

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

V.C.1.f)(6)(a) in-training examination results and activity performance as applicable; (Core)

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

V.C.1.f)(7)(a) professional development. (Core)

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

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

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

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

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. (Core)

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 pharmacist 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. (Core)

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

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. (Core)

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. (Core)

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. (Core)

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. (Core)

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

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. (Core)

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. (Core)

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

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: (Core)

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

Residents must initially be supervised directly. (Core)

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. (Core)

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. (Core)

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. (Core)

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

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. (Core)

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

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. (Core)

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. (Detail)

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

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. (Core)

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. (Core)

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; (Core)

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

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

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. (Core)

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. (Core)

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. (Core)

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. (Core)

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. (Core)

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. (Core)

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

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

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.

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.

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.

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 call cannot be assigned on these free days.

VI.F.1.c)(2) Residents must have at a minimum of 8 hours between scheduled duty periods.

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.

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.

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.

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)

VI.F.1.e)(2) Review of tracking method must be completed on a monthly basis.

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.

VI.F.2. Moonlighting

Residents are not permitted to moonlight.

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.

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

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.

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.

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

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

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

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.

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.

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.

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.

VI.F.3.g)(2) The frequency of at-home call 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.

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:

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.

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.

*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.

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6. ASHP Accreditation Standard for Postgraduate Residency Programs

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