



UAEU

جامعة الإمارات العربية المتحدة  
United Arab Emirates University

# NATIONAL INSTITUTE FOR HEALTH SPECIALTIES

## **NIHS Program Requirements for Specialty Education in Endodontics (Emirati Board in Endodontics)**

*The Emirati Board in Endodontics 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 dentists 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 dental education is an important step of professional development between dental school and independent clinical practice. It is in this vital phase of the continuum of dental 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 dental education transforms dental graduates into dental scholars who care for the patient, family, and a diverse community; create and integrate new knowledge into practice; and educate future generations of dentists to serve the public.

Graduate dental 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 dental education develops dentists who focus on excellence in delivery of safe, equitable, affordable, quality care and the oral health of the populations they serve.

Graduate dental education occurs in clinical and academic settings that establish the foundation for practice-based and lifelong learning. The professional development of the dentist, begins in dental school, 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. This transformation is often physically, emotionally, and intellectually demanding and occurs in a variety of clinical learning environments committed to graduate dental 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**

Endodontics is the dental specialty which is concerned with the morphology, biology, physiology, pathology, and regeneration of the human dental pulp and periradicular tissues. Its study and practice encompass the basic and clinical sciences including biology of the normal pulp, the etiology, diagnosis, prevention and treatment of diseases and injuries of the pulp and associated periradicular conditions.

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

The duration of an advanced dental education program in Endodontics must be a minimum of 36 months of full-time formal training. <sup>(Core)</sup>

## I. Oversight

### I.A. Sponsoring Institution

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

The financial resources must be sufficient to support the program's stated goals and objectives. <sup>(Core)</sup>

**Background and Intent:** *The institution should have the financial resources required to develop and sustain the program on a continuing basis. The program should have the ability to employ an adequate number of full-time faculty, purchase and maintain equipment, procure supplies, reference material and teaching aids as reflected in annual budget appropriations. Financial allocations should ensure that the program will be in a competitive position to recruit and retain qualified faculty. Annual appropriations should provide for innovations and changes necessary to reflect current concepts of education in the advanced dental education discipline.*

The Sponsoring Institution must be the primary clinical training site defined as the most utilized rotation site of clinical activity for the program. <sup>(Core)</sup>

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

### I.B. Participating Sites

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

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

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

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

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

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

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

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

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

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

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

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

**Background and Intent:** *While all residency programs must be sponsored by a single NIHS-accredited Sponsoring Institution, many programs will utilize other clinical settings to provide required or elective training experiences. At times it is appropriate to utilize clinical sites that are not owned by or affiliated with the Sponsoring Institution. Some of these sites may be remote for geographic, transportation, or communication issues. When utilizing such sites, the program must ensure the quality of the educational experience.*

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

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

### **I.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, fellows (if present), faculty members, senior administrative staff members, and other relevant members of its academic community. <sup>(Core)</sup>

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

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

I.D.1.a) Equipment and supplies for use in managing medical and dental emergencies must be readily accessible and functional.  
(Core)

**Background and Intent:** *The facilities and resources (e.g.: support/administrative staff, allied personnel and/or technical staff) should permit the attainment of program goals and objectives. To ensure health and safety for patients, residents, faculty and staff, the physical facilities and equipment should effectively accommodate the clinic and/or laboratory schedule.*

I.D.1.b) The program must document its compliance with the institution's policy and applicable regulations including but not limited to radiation hygiene and protection, ionizing radiation, hazardous materials, and bloodborne and infectious diseases. Policies must be provided to all residents, faculty and appropriate support staff and continuously monitored for compliance. Additionally, policies on bloodborne and infectious diseases must be made available to applicants for admission and patients. (Core)

**Background and Intent:** *The program may document compliance by including the applicable program policies. The program demonstrates how the policies are provided to the residents, faculty, and appropriate support staff and who is responsible for monitoring compliance. Applicable policy states how it is made available to applicants for admission and patients should a request to review the policy be made.*

I.D.1.c) Residents, faculty and appropriate support staff must be encouraged to be immunized against and/or tested for infectious diseases, such as mumps, measles, rubella, hepatitis B, prior to contact with patients and/or infectious objects or materials, to minimize the risk to patients and dental personnel. (Core)

**Background and Intent:** *The program should have written policy that encourages (e.g., delineates the advantages of) immunization for residents, faculty, and appropriate support staff.*

I.D.1.d) All residents, faculty and support staff involved in the direct provision of patient care must be continuously recognized/certified in basic life support procedures, including cardiopulmonary resuscitation. (Core)

**Background and Intent:** *Continuously recognized/certified in basic life support procedures means the appropriate individuals are currently recognized/certified.*

I.D.1.d)(1) Residents and faculty engaged in the provision of sedation in which sedative agents other than nitrous oxide (but may include nitrous oxide in combination with

other agents) are used must have training in and maintenance of age-specific advanced life support (e.g., PALS, ACLS, PEARS), in accordance with current recommendations and local regulations if applicable. <sup>(Core)</sup>

**Background and Intent:** *Guidelines require that providers of sedation have these credentials.*

I.D.1.d)(2) Private practitioners who provide training must follow a similar criterion required for the training faculty. <sup>(Core)</sup>

**Background and Intent:** *Private institutions can be used for training and should meet the same facility standards as institutional facilities.*

I.D.1.e) The program must have access to clinical facilities that include: <sup>(Core)</sup>

I.D.1.e)(1) Space designated specifically for the advanced dental education program in Endodontics. <sup>(Core)</sup>

I.D.1.e)(2) Flexibility to allow for changes in equipment location and for additions or deletions to improve operating efficiency, and promote efficient use of dental instrumentation and allied personnel. <sup>(Core)</sup>

I.D.1.e)(3) Diagnostic imaging and laboratory facilities in close proximity to the patient treatment area. <sup>(Core)</sup>

I.D.1.e)(4) Accessibility for patients with special health care needs. <sup>(Core)</sup>

**Background and Intent:** *A recovery area is defined as a designated space equipped properly for patients recovering from sedation. This space must provide for observation/monitoring by appropriately trained personnel. This could be the operatory where the child was sedated.*

I.D.1.e)(5) Reception and patient education areas. <sup>(Core)</sup>

I.D.1.e)(6) A sufficient number of operatories to accommodate the number of residents enrolled. <sup>(Core)</sup>

I.D.1.e)(7) Lecture and seminar rooms, as well as audiovisual aids, must be available. These rooms must be equipped with PC through which the resident can have access to libraries and scientific journals and other sources pertinent to the area of endodontic practice and research. <sup>(Core)</sup>

I.D.1.e)(8) The design of dental clinics must be suitable for all endodontic clinical procedures, including four-handed dentistry. <sup>(Core)</sup>

I.D.1.e)(9) The training site must be equipped with all relevant instruments, material and equipment that allow resident to practice endodontics at specialist level, including but not limited to: Dental operative microscope, CBCT, digital radiography, rotary machines, different obturation systems, and endodontic microsurgical kits. <sup>(Core)</sup>

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

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

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

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

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

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

I.D.3. Residents must have ready access to specialty-specific and other appropriate reference material in print or electronic format. This must include access to biomedical textbooks, dental journals, online resources, and other sources pertinent to the area of Endodontics practice and research, electronic medical and dental literature databases with full text capabilities. <sup>(Core)</sup>

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

I.D.4.a) Patient Availability:

I.D.4.a)(1) An adequate and diverse pool of patients requiring a sufficient scope, volume and variety of oral



health care needs and a delivery system to provide ample opportunity for training must be available. (Core)

I.D.4.a)(2) It is also encouraged that the program should provide exposure to patients with special health care needs that include, but are not limited to, medical, physical, psychological, or social situations that make consideration of a wide range of assessment and care options necessary. (Core)

**Background and Intent:** *Documentation of the scope, volume and variety of patients and procedures completed by the residents, including those with complex impairment who require substantial functional support and modifications to dental treatment, shall be recorded and are to be available for on-site review.*

I.D.5 The program should provide the residents with patients' pool and case mix that allow them to be competent in variety of endodontic procedures, as listed in the required clinical competencies. (Core)

I.D.6 Evidence of program recourses must be documented and evaluated on annual basis. Example of evidence to demonstrate compliance and sufficient resources: (Core)

- Annual budget for program including faculty and support staff
- Patient availability through appointment book and waiting lists
- Number of cases treated per resident as compared to previous year
- Number of dedicated dental units and their scheduled use
- Number of clinical/clerical support staff
- Number and availability of endodontic faculty and faculty/resident ratio
- List of equipment/supplies.

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

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

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

**Background and Intent:** *The clinical learning environment has become increasingly complex and often includes care providers, students, and post-graduate residents and fellows 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 full-time faculty member appointed as program director with authority and accountability for the overall program, including compliance with all applicable program requirements. <sup>(Core)</sup>

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

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

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. <sup>(Core)</sup>

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

**Background and Intent:** *Fifty percent FTE is defined as two-and-a-half (2.5) day per week. "Administrative time" is defined as non-clinical time spent meeting the responsibilities of the program director.*

*The requirement does not address the source of funding required to provide the specified salary support.*

II.A.3. Qualifications of the program director

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

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

*The broad allowance for educational and/or administrative experience recognizes that strong leaders arise through diverse pathways. These areas of expertise are important when identifying and appointing a program director. The choice of a program director should be informed by the mission of the program and the needs of the community.*

*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.*

*Administration of an Endodontic residency program requires administrative time. At least half of the required 0.5 FTE should include blocked time to complete administrative requirements of the residency. Time spent in clinics supervising residents, while important, should not be counted in the required 0.5 FTE of administrative time.*

II.A.3.b) must be licensed endodontist at consultant level and have at least three years post residency documented experience in Endodontics, or with a specialty qualification that are acceptable to the Central Accreditation Committee; <sup>(Core)</sup>

II.A.3.c) must include current dental licensure and appropriate dental staff appointment; <sup>(Core)</sup>

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

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

II.A.3.e) It is preferable for the program director to demonstrate evidence of on-going research or scholarly activities, including but not limited to: <sup>(Detail)</sup>

- Participation in continuing education in endodontics.
- Participation in regional or national endodontic societies.
- Participation in research.
- Presentation and publication of scientific/clinical studies.

#### II.A.4. Program Director Responsibilities

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

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

II.A.4.a)(1) be a role model of professionalism; <sup>(Core)</sup>

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

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

**Background and Intent:** *The mission of institutions participating in graduate dental education is to improve the oral health of the public. Each community has health needs that vary based upon location and demographics. Programs must understand the social determinants of oral health of the populations they serve and incorporate them in the design and implementation of the program curriculum, with the ultimate goal of addressing these needs and health disparities.*

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

**Background and Intent:** *The program director may establish a leadership team to assist in the accomplishment of program goals. Residency programs can be highly complex. In a complex organization, the leader typically has the ability to delegate authority to others yet remains accountable. The leadership team may include dental and non-dental personnel with varying levels of education, training, and experience.*

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

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

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

**Background and Intent:** *The program director has the responsibility to ensure that all who educate residents effectively role model the Core Competencies. Working with a resident is a privilege that is earned through effective teaching and professional role*

*modeling. This privilege may be removed by the program director when the standards of the clinical learning environment are not met.*

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

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

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

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

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

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

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

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

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

II.A.4.a)(14) provide verification of an individual resident's completion upon the residents' request, within 30 days; <sup>(Core)</sup>

***Background and Intent:*** *Primary verification of graduate dental education is important to credentialing of dentists for further training and practice. Such verification must be accurate and timely. Sponsoring Institution and program policies for record retention are important to facilitate timely documentation of residents who have previously completed*

*the program. Residents who leave the program prior to completion also require timely documentation of their summative evaluation.*

II.A.4.a)(15) obtain review and approval of the Sponsoring Institution's DIO before submitting information, as required in the Institutional Requirements and outlined in the NIHS guidelines to the Common Program Requirements. <sup>(Core)</sup>

II.A.4.a)(16) develop and implement the curriculum plan based on the clinical and didactic requirements mentioned in this document; <sup>(Core)</sup>

II.A.4.a)(17) plan for and operation of the facilities used in the endodontic program; <sup>(Core)</sup>

II.A.4.a)(18) ensure and oversee overall continuity and quality of patient care as it relates to program; <sup>(Core)</sup>

II.A.4.a)(19) ensure and oversee ongoing planning, evaluation and improvement of the quality of the program;

II.A.4.a)(20) prepare graduates for certification by the Emirati Board of Endodontics. <sup>(Core)</sup>

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

II.A.5.a) For programs with an approved resident complement of more than 15, the sponsoring institution must appoint an Associate Program director to support the PD by actively participating in administrative and educational activities <sup>(Core)</sup>

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

II.A.5.b)(1) The APD must not work more than 0.7 FTE in a clinical capacity. This must be demonstrated through clinical schedules over the entire period since the last accreditation visit or since program inception, whichever is shorter. <sup>(Detail)</sup>

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

II.A.5.d) APD should be licensed as a specialist in endodontics as per the unified healthcare professional qualification requirements issued by the UAE health authorities. <sup>(Core)</sup>

## II.B. Faculty

Faculty members are a foundational element of graduate dental 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. They are role models for future generations of dentists by demonstrating compassion, commitment to excellence in teaching and patient care, professionalism, and a dedication to lifelong learning. Faculty members experience the pride and joy of fostering the growth and development of future colleagues. The care they provide is enhanced by the opportunity to teach. By employing a scholarly approach to patient care and engaging in scholarly activities, faculty members, through the graduate dental education system, improve the oral and overall health of the individual and the population.

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, there must be enough faculty members with appropriate specialist license in endodontics and with adequate competence to instruct and supervise all residents at that location. <sup>(Core)</sup>

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

II.B.2. Faculty members must:

II.B.2.a) be role models of professionalism; <sup>(Core)</sup>

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

**Background and Intent:** *Patients have the right to expect quality, cost-effective care with patient safety at its core. The foundation for meeting this expectation is formed during residency and fellowship. 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.c) demonstrate a strong interest in the education of residents; <sup>(Core)</sup>

II.B.2.d) devote sufficient time to the educational program to fulfill their supervisory and teaching responsibilities including timely continuous feedback and assessment; <sup>(Core)</sup>

II.B.2.e) administer and maintain an educational environment conducive to educating residents; <sup>(Core)</sup>

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

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

**Background and Intent:** *Faculty development is intended to describe structured programming developed for the purpose of enhancing transference of knowledge, skill, and behavior from the educator to the learner. Faculty development may occur in a variety of configurations (lecture, workshop, etc.) using internal and/or external resources. Programming is typically needs-based (individual or group) and may be specific to the institution or the program. Faculty development programming is to be reported for the residency program faculty in the aggregate.*

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

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

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

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

II.B.2.h) All faculty, including those at major and minor educational activity sites, must be calibrated to ensure consistency in training and evaluation of residents that supports the goals and objectives of the program.

### II.B.3. Faculty Qualifications

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

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

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

II.B.3.b)(2) In addition to the faculty members who are specialized and dedicated to endodontics, the program should include faculty members with relevant didactic and



clinical experience in restorative dentistry and other dental specialties that allow residents to be trained in managing multidisciplinary cases. <sup>(Core)</sup>

II.B.3.c) Any non-dentist faculty members who participate in residency program education must be approved by the program director and hold appropriate medical license or degree that allow them to teach the relevant topics. <sup>(Core)</sup>

**Background and Intent:** *The provision of optimal and safe patient care requires a team approach. The education of residents by non-dentist educators enables the resident to better manage patient care and provides valuable advancement of the residents' knowledge. Furthermore, other individuals contribute to the education of the resident in the basic science of the specialty or in research methodology. If the program director determines that the contribution of a non-dentist individual is significant to the education of the residents, the program director may designate the individual as a program faculty member or a program core faculty member.*

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

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

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

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

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

II.B.4.c) Core faculty member-to-resident ratio specific to Endodontic program is 1:4. <sup>(Core)</sup>

### II.C. Program Coordinator

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

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

**Background and Intent:** Each program requires a lead administrative person, frequently referred to as a program coordinator, administrator, or as titled by the institution. This person will frequently manage the day-to-day operations of the program and serve as an important liaison with learners, faculty and other staff members, and the NIHS. Individuals serving in this role are recognized as program coordinators.

The program coordinator is a member of the leadership team and is critical to the success of the program. As such, the program coordinator must possess skills in leadership and personnel management. Program coordinators are expected to develop unique knowledge of the NIHS and Program Requirements, policies, and procedures. Program coordinators assist the program director in accreditation efforts, educational programming, and support of residents.

Programs, in partnership with their Sponsoring Institutions, should encourage the professional development of their program coordinators and avail them of opportunities for both professional and personal growth. Programs with fewer residents may not require a full-time coordinator; one coordinator may support more than one program.

## **II.D. Other Program Personnel**

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

II.D.1. Adequate allied dental personnel assigned to the program to ensure clinical and laboratory technical support are suitably trained and credentialed. <sup>(Core)</sup>

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

Allied dental personnel are expected to be available for operating room cases, conscious/deep sedation patients, surgical procedures and behavior management situations. There are instances when a resident assisting another resident may be beneficial as long as the experience does not negatively impact the residents' education. Clinic scheduling and off service rotations will be considered in assessing adequacy of allied dental personnel.

## **III. Resident Appointments**

### **III.A. Eligibility Requirements**

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

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

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

III.A.2.a) Residency programs must receive verification of each resident's level of competency in the required clinical field using evaluations from the prior training program upon matriculation. <sup>(Core)</sup>

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

III.A.3. A dentist who has completed a residency program that was not accredited by NIHS, may enter a NIHS-accredited residency program in the same specialty at the PGY-1 level and, at the discretion of the program director of the NIHS-accredited program and with approval by the GMEC, may be advanced to the PGY-2 level based on evaluations at the NIHS-accredited program. <sup>(Core)</sup>

III.A.4). The program shall ensure using appropriately documented selection and interview criteria. <sup>(Core)</sup>

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

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

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

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

### **III.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. <sup>(Core)</sup>

## **IV. Educational Program**

The NIHS accreditation system is designed to encourage excellence and innovation in graduate medical and dental education regardless of the organizational affiliation, size, or location of the program.

The educational program must support the development of knowledgeable, skillful dental specialists who provide compassionate care. The education program must be

designed to provide special knowledge and skills beyond the undergraduate training and be oriented to the accepted standards of the discipline's practice as set forth in specific standards contained in this document.

#### **IV.A. Curriculum Components**

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

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

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

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

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

IV.A.4.a) These responsibilities are described for each PGY level and specified projected progress as determined by the Clinical Competency Committee (CCC). <sup>(Detail)</sup>

IV.A.5. A broad range of structured didactic activities that emphasize on evidence-based practice. Evidence-based dentistry is an approach to oral health care that requires the judicious integration of systematic assessments of clinically relevant scientific evidence, relating to the patient's oral and medical condition and history, with the dentist's clinical expertise and the patient's treatment needs and preferences; <sup>(Core)</sup>

IV.A.5.a) Residents must be provided with protected time to participate in these structured core didactic activities. <sup>(Core)</sup>

Didactic activities include, but are not limited to: <sup>(Core)</sup>

- Formal instruction (a module/lecture materials or course syllabi) in evidence-based practice
- Didactic program course syllabi, course content outlines, or lecture materials that integrate aspects of evidence-based practice
- Literature review seminar(s)
- Multidisciplinary grand rounds to illustrate evidence-based practice

- Projects/portfolios that include critical reviews of the literature using evidence-based practice principles (or “searching publication databases and appraisal of the evidence”)
- Assignments that include publication database searches and literature appraisal for best evidence to answer patient-focused clinical questions.

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

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

## **IV.B. Defined Core Competencies**

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

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

Residents must demonstrate a commitment to professionalism and an adherence to ethical principles. <sup>(Core)</sup>

IV.B.1.a)(1) Residents must demonstrate competence in:

IV.B.1.a)(1)(a) compassion, integrity, and respect for others; <sup>(Core)</sup>

IV.B.1.a)(1)(b) responsiveness to patient needs that supersedes self-interest; <sup>(Core)</sup>

IV.B.1.a)(1)(c) respect for patient privacy and autonomy; <sup>(Core)</sup>

IV.B.1.a)(1)(d) accountability to patients, society, and the profession; <sup>(Core)</sup>

IV.B.1.a)(1)(e) respect and responsiveness to diverse patient populations, including but not limited to diversity in gender, age, culture, race, religion, disabilities, national origin, socioeconomic status, and sexual orientation; <sup>(Core)</sup>

IV.B.1.a)(1)(f) ability to recognize and develop a plan for one’s own professional wellbeing; <sup>(Core)</sup>

IV.B.1.a)(1)(g) appropriately disclosing and addressing conflict or duality of interest. <sup>(Core)</sup>

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

Residents must be able to provide patient care that is appropriate, and effective for the treatment or oral health problems and the promotion of oral health. <sup>(Core)</sup>

IV.B.1.b)(1) Records related to the educational program, must be documented in the resident clinical logs after completion of specified procedures and/or patient complexity, including: <sup>(Core)</sup>

- diagnostic procedures performed (including interpreting CBCT scans);
- clinical procedures (e.g., non-surgical and surgical endodontic procedures, resorption cases, regenerative and vital pulp therapy procedures, managing mishaps, emergency, trauma, restorative, multi-disciplinary, etc.);
- patient diversity/complexity (e.g., well-patient, medically complex, special needs, hospital based, etc.).

**Background and Intent:** *These records are to be available for on-site review: overall program objectives, objectives of resident rotations, specific resident schedules by semester or year, completed resident evaluation forms for current residents and recent alumni, self-assessment process, curricula vitae of faculty responsible for instruction. The resident's Logbook provides programs with data required for program improvement and gives residents and official record of clinical procedures required by regulatory boards and hospitals.*

#### IV.B.1.c) Medical Knowledge

Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social behavioral sciences, as well as the application of this knowledge to patient care. <sup>(Core)</sup>

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

Residents must demonstrate the ability to investigate and evaluate their care of patients, applying scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning. <sup>(Core)</sup>

IV.B.1.d)(1) Residents must demonstrate competence in:

- IV.B.1.d)(1)(a) identifying strengths, deficiencies, and limits in one's knowledge and expertise; <sup>(Core)</sup>

IV.B.1.d)(1)(b) setting learning and improvement goals; <sup>(Core)</sup>

IV.B.1.d)(1)(c) identifying and performing appropriate learning activities; <sup>(Core)</sup>

IV.B.1.d)(1)(d) systematically analyzing practice using quality improvement methods and implementing changes with the goal of practice improvement; <sup>(Core)</sup>

IV.B.1.d)(1)(e) incorporating feedback and formative evaluation into daily practice; <sup>(Core)</sup>

IV.B.1.d)(1)(f) locating, appraising, and assimilating evidence from scientific studies related to their patients' health problems; <sup>(Core)</sup>

IV.B.1.d)(1)(g) using information technology to optimize learning. <sup>(Core)</sup>

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

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. <sup>(Core)</sup>

IV.B.1.e)(1) Residents must demonstrate competence in:

IV.B.1.e)(1)(a) communicating effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds; <sup>(Core)</sup>

IV.B.1.e)(1)(b) communicating effectively with dentists, physicians, other health professionals and health- and oral health-related agencies; <sup>(Core)</sup>

IV.B.1.e)(1)(c) working effectively as a member or leader of a health care team or other professional group; <sup>(Core)</sup>

IV.B.1.e)(1)(d) educating patients, families, students, residents, and other health professionals; <sup>(Core)</sup>

IV.B.1.e)(1)(e) acting in a consultative role to other dentists, physicians and oral health professionals; <sup>(Core)</sup>

IV.B.1.e)(1)(f) maintaining comprehensive, timely, and legible medical and dental records, if applicable. <sup>(Core)</sup>

#### IV.B.1.f) Systems-based Practice

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, including the social determinants of oral health, as well as the ability to call effectively on other resources to provide optimal oral health care. <sup>(Core)</sup>

IV.B.1.f)(1) Residents must demonstrate competence in:

IV.B.1.f)(1)(a) working effectively in various oral health care delivery settings and systems relevant to their clinical specialty; <sup>(Core)</sup>

IV.B.1.f)(1)(b) coordinating patient oral health care across the health care continuum and beyond as relevant to their clinical specialty; <sup>(Core)</sup>

IV.B.1.f)(1)(c) advocating for quality patient care and optimal patient care systems; <sup>(Core)</sup>

IV.B.1.f)(1)(d) working in interprofessional teams to enhance patient safety and improve patient care quality; <sup>(Core)</sup>

IV.B.1.f)(1)(e) participating in identifying system errors and implementing potential systems solutions; <sup>(Core)</sup>

IV.B.1.f)(1)(f) incorporating considerations of value, cost awareness, delivery and payment, and risk benefit analysis in patient and/or population-based care as appropriate; <sup>(Core)</sup>

IV.B.1.f)(1)(g) understanding oral health care finances and its impact on individual patients' health decisions. <sup>(Core)</sup>

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

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



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

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

IV.C.2. The program must provide instruction and experience in pain management as applicable in Endodontics, including recognition of the signs of addiction. <sup>(Core)</sup>

IV.C.3. The program must provide the opportunity to extend the resident's diagnostic ability, basic and advanced clinical knowledge and skills, and critical judgment beyond that provided in undergraduate education. The program must also provide experience in closely related areas to ensure that residents become competent in comprehensive care. <sup>(Core)</sup>

IV.C.4. The program curriculum must provide special knowledge and skills beyond the undergraduate training and should be designed to cover: <sup>(Core)</sup>

IV.C.4.a) Biomedical Sciences

Instruction in the biomedical sciences must provide information emphasizing principles and recent developments in order to meet the advanced program's objectives. <sup>(Core)</sup>

**Background and Intent:** *To ensure that the resident can relate the biomedical sciences and their application to the clinical practice.*

IV.C.4.a)(1) Instruction must be provided in: <sup>(Core)</sup>

- Anatomy (gross and micro) of soft and hard tissues of the head and neck.
- Embryology.
- Infectious and immunologic processes in oral health and disease.
- Wound healing.
- Oral medicine and oral pathology.
- Pharmacotherapeutics.
- Research methodology and statistics.
- Neurosciences.
- Biomaterials.

#### IV.C.4.b) Endodontic core topics

In-depth didactic instruction in core endodontic topics must provide information emphasizing the principles of the art and science of endodontics and the recent developments in order to meet the program's objectives. <sup>(Core)</sup>

**Background and Intent:** *To ensure that developing new theories and techniques of endodontic treatment are included in the advanced program curriculum. Instruction should include the biologic and technical aspects of maintaining, replacing, and enhancing the natural dentition, including mechanisms for enhanced tissue healing and tissue regeneration.*

#### IV.C.4.b)(1) Instruction must be provided in: <sup>(Core)</sup>

- Clinical Examination, Diagnosis, Case Assessment, and Treatment Planning
- Dental Radiography and Radiographic Interpretation
- Magnification in Endodontic
- Odontogenic and non-odontogenic Orofacial pain
- Anesthesia and Pain Control
- Management of Endodontic Emergencies
- Structure, and Function, of the pulp dentin complex
- Reactions to Caries and Dental Procedures of Dental-Pulp Complex
- Pulpal and Periapical Pathology and Immunology
- Microbiology of Endodontic Infections
- Teeth Morphology, and Morphological Anomalies
- Access, Cleaning, and Shaping of the Root Canal System
- Endodontic Biomaterial and instruments
- Obturation of the Cleaned and Shaped Root Canal System
- Nonsurgical Endodontic Retreatment
- Surgical Endodontic Treatment
- Management of Mishaps and Complications
- Management of Dental Traumatic injuries
- Endodontic Management of Immature Teeth
- Vital Pulp Therapy
- Endodontic Regeneration
- Outcomes in Endodontics
- Restoration of Endodontically Treated Teeth
- Root Resorption
- Bleaching

- Endodontic and Periodontal Interrelationships
- Endodontic and Orthodontic interrelationships
- Evidence-based Endodontics

#### IV.C.4.c) Clinical sciences

IV.C.4.c)(1) A minimum of 40% and a maximum of 60% of the total clock hours in a 36 months program must be devoted to clinical care. <sup>(Core)</sup>

IV.C.4.c)(2) Endodontic treatment must be evidence-based. (EBE is the integration of the best research evidence with clinician expertise and patient values).

Examples of evidence to demonstrate compliance may include: <sup>(Core)</sup>

- Endodontic literature applied to clinical treatment decisions.
- Integration of current systematic literature reviews with treatment conferences.
- Ethics applied to patient management.

IV.C.4.c)(3) Clinical competencies to be achieved over the 36 months training. <sup>(Core)</sup>

IV.C.4.c)(3)(a) The educational program must provide in-depth didactic and clinical training so that residents are competent in: <sup>(Core)</sup>

IV.C.4.c)(3)(a)(i) History taking, clinical/radiographic examination and Diagnosis. <sup>(Core)</sup>

IV.C.4.c)(3)(a)(ii) Producing treatment plan. <sup>(Core)</sup>

IV.C.4.c)(3)(a)(iii) Outcome evaluation and discuss the prognosis of different treatment modalities. <sup>(Core)</sup>

IV.C.4.c)(3)(a)(iv) Non-surgical root canal treatment. <sup>(Core)</sup>

**Background and Intent:** *To ensure that residents are trained to manage all aspects of the non-surgical root canal treatment.*

Evidence to demonstrate competency should include but not limited to: <sup>(Core)</sup>

- Rubber dam isolation,
- Access cavity preparation,
- work length determination using different methods,
- Cleaning, shaping and obturating the root canal system using contemporary endodontic techniques
- Temporization

IV.C.4.c(3)(a)(v) Non-surgical root canal retreatment. <sup>(Core)</sup>

**Background and Intent:** *To ensure that residents are trained to manage all aspects of the non-surgical root canal retreatment.*

Evidence to demonstrate competency should include but not limited to: <sup>(Core)</sup>

- Removal/disassembly of coronal restoration,
- Core and post removal
- Removal of root canal filling material
- Management of endodontic mishaps.

IV.C.4.c(3)(a)(vi) Surgical endodontic procedures. <sup>(Core)</sup>

**Background and Intent:** *Instruction and training in surgical endodontic treatment and retreatment is to ensure that residents are trained to provide comprehensive treatment which may include hard and soft tissue management in the surgical site and the removal of teeth as part of an endodontic treatment plan.*

Evidence to demonstrate competency should include but not limited to: <sup>(Core)</sup>

- Exploratory surgery
- Surgical management of perforation or resorptive defects
- Apicoectomy/root resection/root amputation
- Performing a minimum of 10 surgical endodontic procedures, including apicoectomy on at least 1 mandibular molar.

IV.C.4.c(3)(a)(vii) Radiography and other diagnostic imaging technologies, including

use of Limited Field of View (LFOV) Cone Beam Computed Tomography (CBCT). <sup>(Core)</sup>

IV.C.4.c(3)(a)(viii) Management of endodontic treatment of medically compromised patients. <sup>(Core)</sup>

IV.C.4.c(3)(a)(ix) Emergency treatment for endodontic conditions. <sup>(Core)</sup>

IV.C.4.c(3)(a)(x) Management of patients with orofacial pain and anxiety, including pharmacological management of pre, intra and post-operative odontogenic pain. <sup>(Core)</sup>

IV.C.4.c(3)(a)(xi) Endodontic procedures as part of multidisciplinary treatment plan. <sup>(Core)</sup>

**Background and Intent:** *Instruction and training in endodontic procedures that involve consultation and coordination with other dental disciplines.*

Evidence to demonstrate competency may include but not limited to: <sup>(Core)</sup>

- Preparation of space for intraradicular restorations in endodontically treated teeth.
- Endodontic procedure in primary teeth
- Diagnosis and treatment of periodontal conditions and defects in conjunction with the treatment of the specific tooth undergoing endodontic therapy; treatment should be provided in consultation with the individuals who will assume the responsibility for the completion or supervision of any additional periodontal maintenance or treatment.
- Placement of intraradicular restorations and cores in endodontically treated teeth; when the patient is referred, this treatment is accomplished in consultation with the restorative dentist.
- Implant dentistry (exposure to implant treatment planning and placement)
- Extrusion procedures.

IV.C.4.c(3)(a)(xii) Communication with patients and health care professionals. <sup>(Core)</sup>

IV.C.4.c(3)(a)(xiii) Use of magnification technologies. <sup>(Core)</sup>

**Background and Intent:** *To ensure that residents are trained in the use of instruments that provide magnification and illumination of the operative field beyond that of magnifying eyewear. In addition to the operating microscope, these instruments may include, but are not limited to, the endoscope, orascope or other developing magnification technologies.*

IV.C.4.c(3)(a)(xiv) Vital pulp management. <sup>(Core)</sup>

IV.C.4.c(3)(a)(xv) Endodontic management of developing permanent teeth or teeth with open apices. <sup>(Core)</sup>

IV.C.4.c(3)(a)(xvi) Revascularization/regenerative endodontics. <sup>(Core)</sup>

IV.C.4.c(3)(a)(xvii) Intracoronal bleaching procedures. <sup>(Core)</sup>

IV.C.4.c(3)(a)(xviii) Endodontic management of traumatic dental injuries. <sup>(Core)</sup>

**Background and Intent:** *To ensure that residents are trained to manage all aspects of the endodontic care of teeth with traumatic injuries.*

Examples of evidence to demonstrate compliance may include but not limited to: <sup>(Core)</sup>

- Vital pulp therapy in situations in which traumatic crown fractures result in pulpal involvement.
- Root canal therapy for traumatically injured teeth in order to prevent or arrest inflammatory, infection-related root resorption.
- Monitoring and evaluating traumatized teeth and associated tissues to assess the pulpal status and healing over time (reattachment, revascularization, healing of root fractures, etc.).

- Diagnosis and root canal treatment for teeth with pulp necrosis as a result of traumatic injuries.
- Induction of apical hard tissue barriers in developing teeth with open apices and necrotic pulps.
- Placement of apical barriers for immediate obturation of teeth with open apices.

IV.C.4.d) The educational program must provide instruction in the following areas: <sup>(Core)</sup>

- The history of endodontics.
- Teaching methodology.
- Jurisprudence and risk management.
- Practice management.
- Medical emergencies.

IV.C.4.e) Residents must actively participate in seminars or conferences involving literature and textbook reviews. <sup>(Core)</sup>

IV.C.4.f) Residents must actively participate in endodontic and interdisciplinary seminars and conferences evaluating diagnostic data, treatment plans, treatment procedures, and outcomes assessment. <sup>(Core)</sup>

IV.C.4.g) The program must include a system for follow-up evaluation of patients to enable Residents to assess the outcome of their treatment. <sup>(Core)</sup>

IV.C.4.h) Comprehensive records of history, diagnosis, and treatment must be maintained for each patient. <sup>(Core)</sup>

## **IV.D. Scholarship**

Dentistry is both an art and a science. The dentist is a humanistic scientist who cares for patients. This requires the ability to think critically, evaluate the literature, appropriately assimilate new knowledge, and practice lifelong learning. The program and faculty must create an environment that fosters the acquisition of such skills through resident participation in scholarly activities. Scholarly activities must include discovery, integration, application, and teaching.

### **IV.D.1. Program Responsibilities**

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

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

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

**Background and Intent:** *Elements of a scholarly approach to patient care include:*

- *Asking meaningful questions to stimulate residents to utilize learning resources to create a differential diagnosis, a diagnostic algorithm, and treatment plan*
- *Challenging the evidence that the residents use to reach their dental decisions so that they understand the benefits and limits of the dental literature*
- *When appropriate, dissemination of scholarly learning in a peer-reviewed manner (publication or presentation)*
- *Improving resident learning by encouraging them to teach using a scholarly approach*

IV.D.2. Faculty Scholarly Activity

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

- Research in basic science, education, translational science, patient care, or population health
- Peer-reviewed journal publications, case-presentation publications
- Quality improvement and/or patient safety initiatives
- Systematic reviews, meta-analyses, review articles, chapters in dental 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: <sup>(Core)</sup>

IV.D.2.b)(1) faculty participation in posters, workshops, quality improvement presentations, podium presentations, reviewed print/electronic resources, articles or publications, book chapters, textbooks, webinars, service on professional committees, or serving as a journal reviewer, journal editorial board member, or editor. <sup>(Core)</sup>



IV.D.2.b)(2) peer-reviewed publication incl. case-discussion and letters to the editor. <sup>(Core)</sup>

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

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

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

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

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

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

## V. Evaluation

### V.A. Resident Evaluation

#### 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 level of training and program, respectively and is utilized to make decisions about promotion to the next level of training, or program completion.

Quarterly 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) Faculty members must directly observe, evaluate, and frequently provide feedback on resident performance during each quarter or similar educational assignment. <sup>(Core)</sup>

V.A.1.a)(1) This feedback will allow for the development of the learner. More frequent feedback is strongly encouraged for residents who have deficiencies that may result in a poor final rotation evaluation. <sup>(Detail)</sup>

V.A.1.b) Evaluation must be documented at the completion of the assignment. <sup>(Core)</sup>

V.A.1.b)(1) For block rotations of greater than three months in duration, evaluation must be documented at least every three months. <sup>(Core)</sup>

V.A.1.b)(2) For block rotations of any duration, a written evaluation must be provided at the end of the rotation. <sup>(Core)</sup>

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

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

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

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

V.A.1.d)(1) meet with and review with each resident their documented semi-annual evaluation of performance; <sup>(Core)</sup>

V.A.1.d)(1)(a) Review of resident Case-Logs, WBA and progress in the clinical competencies must be a part of the semi-annual review. <sup>(Detail)</sup>

V.A.1.d)(2) assist residents in developing individualized learning plans to capitalize on their strengths and identify areas for growth; <sup>(Core)</sup>

V.A.1.d)(3) develop plans for residents failing to progress, following both the NIHS Emirati Board and institutional policies and procedures. <sup>(Core)</sup>

Residents who are experiencing difficulties with achieving progress may require intervention to address specific deficiencies. Such intervention, documented in an individual remediation plan developed by the program director or a faculty mentor and the resident, will take a variety of forms based on the specific learning needs of the resident. However, the NIHS recognizes that there are situations which require more significant intervention that may alter the time course of resident progression. To ensure due process, it is essential that the program director follow NIHS and institutional policies and procedures.

V.A.1.e) At least annually, there must be a summative evaluation of each resident that includes their readiness to progress to the next year of the program, if applicable. <sup>(Core)</sup>

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

V.A.1.g) Assessment should specifically monitor the resident's knowledge by use of a formal In-Training Examination or other cognitive exams. Tests results should not be the sole criterion of resident knowledge and should not be used as the sole criterion for promotion to a subsequent PG level. <sup>(Detail)</sup>

V.A.1.h) Resident Promotion:

Residents' promotion from PGY-1 to PGY-2 and PGY-3 will be decided by the program director after taking in consideration all evaluation tools, portfolios and progress in achieving the clinical competencies relevant to their training level. Each promotion must be discussed in the dedicated Clinical Competency Committee (CCC) meeting(s). <sup>(Core)</sup>

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. <sup>(Core)</sup>

V.A.2.a)(1) The Endodontic-specific Milestones, and when applicable the specialty-specific Case Logs, must be used as tools to document performance and verify that the resident has demonstrated sufficient competence to be able to engage in autonomous practice upon completion of the program, and once he/she obtain the license to practice in Endodontic speciality. <sup>(Core)</sup>

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; <sup>(Core)</sup>

V.A.2.a)(2)(b) verify that the resident has demonstrated the knowledge, skills, and behaviours necessary to enter autonomous practice, including the submission of satisfactory Case-log, portfolio and completion of the required clinical competencies as evident by the WBAs; <sup>(Core)</sup>

V.A.2.a)(2)(c) consider recommendations from the Clinical Competency Committee <sup>(Core)</sup>

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

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

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

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

V.A.3.a)(2) The Program Director has final responsibility for resident evaluation and promotion decisions. <sup>(Core)</sup>

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

V.A.3.b)(1) review all residents evaluation at least semi-annually; <sup>(Core)</sup>

V.A.3.b)(2) determine each resident's progress on achievement of the specialty-specific objectives; <sup>(Core)</sup>

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

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

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

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

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

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

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

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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

V.C.1.c)(6)(b) board pass and certification rates (Core)

V.C.1.c)(6)(c) graduates' performance. (Core)

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

V.C.1.c)(7)(a) faculty evaluation; (Core)

V.C.1.c)(7)(b) professional development. (Core)

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

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

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

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

V.C.2. The program will be accredited and reaccredited by the NIHS in accordance 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 dentists 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 Prosthetic Dentistry to obtain the Board Certification. (Core)

V.C.5. During the residency, the Residents are strongly encouraged to sit for an organized Annual In-Training Examination. (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 dentists
  - the joy of curiosity, problem-solving, intellectual rigor, 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 dentists share responsibility for promoting patient safety and enhancing quality of patient care. Graduate dental education must prepare residents to provide the highest level of clinical care with continuous focus on the safety, individual needs, and humanity of their patients. It is the right of each patient to be cared for by residents who are appropriately supervised; possess the requisite knowledge, skills, and abilities; understand the limits of their knowledge and experience; and seek assistance as required to provide optimal patient care.

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

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

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

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

A culture of safety requires continuous identification of vulnerabilities and a willingness to transparently deal with them. An effective organization has formal mechanisms to



assess the knowledge, skills, and attitudes of its personnel toward safety in order to identify areas for improvement.

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

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

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

Programs must provide formal educational activities that promote patient safety-related goals, tools, and techniques. (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 dentists to model, and for residents to develop and apply.

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

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

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

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

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

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

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

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

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

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

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

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

## VI.A.2. Supervision and Accountability

VI.A.2.a) Although the attending dentist is ultimately responsible for the care of the patient, every dentist 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 dental 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 medicine; and establishes a foundation for continued professional growth.

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

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

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

VI.A.2.b) Supervision may be exercised through a variety of methods. For many aspects of patient care, the supervising dentist 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, either on site or by means of telecommunication technology. Some activities require the physical presence of the supervising faculty member. In some circumstances, supervision may include post-hoc review of resident-delivered care with feedback.

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

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

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

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

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

PGY-1 residents must initially be supervised directly. <sup>(Core)</sup>

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

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

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

VI.A.2.c)(2)(a) Clinical faculty must be immediately available to provide direct supervision to residents for all clinical sessions. <sup>(Core)</sup>

**Background and Intent:** *Clinical faculty are physically in the treatment area for clinical sessions with scheduled patients and, immediately available within one minute, for all sedation patients. Indirect supervision should only be used after careful consideration of the competence of the resident and also based on the delineation of privileges and procedure types. Clinical faculty are held accountable for responsibilities and attendance. Certain funding sources require specific faculty to resident ratios which should be observed.*

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

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

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

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

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

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

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

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. <sup>(Core)</sup>

## **VI.B. Professionalism**

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

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; <sup>(Core)</sup>

VI.B.2.b) be accomplished without excessive reliance on residents to fulfill non-dentist 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.4.f) accurate reporting of clinical and educational work hours, patient outcomes, and clinical experience data. (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. <sup>(Core)</sup>

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

Psychological, emotional, and physical well-being are critical in the development of the competent, caring, and resilient dentist and require proactive attention to life inside and outside of dentistry. Well-being requires that dentists retain the joy in dentistry while managing their own real-life stresses. Self-care and responsibility to support other members of the health care team are important components of professionalism; they are also skills that must be modeled, learned, and nurtured in the context of other aspects of residency training.

Residents and faculty members are at risk for burnout and depression. Programs, in partnership with their Sponsoring Institutions, have the same responsibility to address well-being as other aspects of resident competence. Dentists and all members of the oral health care team share responsibility for the well-being of each other. For example, a culture which encourages covering for colleagues after an illness without the expectation of reciprocity reflects the ideal of professionalism. A positive culture, in a clinical learning environment, models constructive behaviors and prepares residents with the skills and attitudes needed to thrive throughout their careers.

VI.C.1. The responsibility of the program, in partnership with the Sponsoring Institution, to address well-being must include:

VI.C.1.a) efforts to enhance the meaning that each resident finds in the experience of being a dentist, including protecting time with patients, minimizing non-dentist obligations, providing administrative support, promoting progressive autonomy and flexibility, and enhancing professional relationships; <sup>(Core)</sup>

VI.C.1.b) attention to scheduling, work intensity, and work compression that impacts resident well-being; <sup>(Core)</sup>

VI.C.1.c) evaluating workplace safety data and addressing the safety of residents and faculty members; <sup>(Core)</sup>

VI.C.1.d) policies and programs that encourage optimal resident and faculty member well-being; <sup>(Core)</sup>

VI.C.1.e) attention to resident and faculty member burnout, depression, and substance use disorders. The program, in partnership with its Sponsoring Institution, must educate faculty

members and residents in identification of the symptoms of burnout, depression, and substance use disorders, including means to assist those who experience these conditions. Residents and faculty members must also be educated to recognize those symptoms in themselves and how to seek appropriate care. The program, in partnership with its Sponsoring Institution, must: <sup>(Core)</sup>

VI.C.1.e)(1) encourage residents and faculty members to alert the program director or other designated personnel or programs when they are concerned that another resident, fellow, or faculty member may be displaying signs of burnout, depression, a substance use disorder, suicidal ideation, or potential for violence; <sup>(Core)</sup>

VI.C.1.e)(2) provide access to appropriate tools for self-screening; <sup>(Core)</sup>

VI.C.1.e)(3) provide access to confidential, affordable mental health assessment, counseling, and treatment, including access to urgent and emergent care 24 hours a day, seven days a week. <sup>(Core)</sup>

VI.C.2. There are circumstances in which residents may be unable to attend work, including but not limited to fatigue, illness, family emergencies, and parental leave. Each program must allow an appropriate length of absence for residents unable to perform their patient care responsibilities. <sup>(Core)</sup>

VI.C.2.a) The program must have policies and procedures in place to ensure coverage of patient care. <sup>(Core)</sup>

VI.C.2.b) These policies must be implemented without fear of negative consequences for the resident who is or was unable to provide the clinical work. <sup>(Core)</sup>

**Background and Intent:** *Residents may need to extend their length of training depending on length of absence and specialty board eligibility requirements. Teammates should assist colleagues in need and equitably reintegrate them upon return.*

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

VI.D.1. Programs must:

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

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



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

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

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

### VI.E.1. Clinical Responsibilities

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

### VI.E.2. Teamwork

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

### VI.E.3. Transitions of Care

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

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

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

VI.E.3.d) Programs and clinical sites must maintain and communicate schedules of attending faculty and residents currently responsible for care. <sup>(Core)</sup>

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

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

Programs, in partnership with their Sponsoring Institutions, must design an effective program structure that is configured to provide residents with educational and clinical experience opportunities, as well as reasonable opportunities for rest and personal activities.

### **VI.F.1. Maximum Hours of Clinical and Educational Work per Week**

Clinical and educational work hours must be limited to no more than 80 hours per week, averaged over a four-week period, inclusive of all in-house clinical and educational activities and clinical work done from home. <sup>(Core)</sup>

### **VI.F.2. Mandatory Time Free of Clinical Work and Education**

VI.F.2.a) The program must design an effective program structure that is configured to provide residents with educational opportunities, as well as reasonable opportunities for rest and personal well-being. <sup>(Core)</sup>

VI.F.2.b) Residents should have eight hours off between scheduled clinical work and education periods. <sup>(Detail)</sup>

VI.F.2.c) Residents must be scheduled for a minimum of one day in seven free of clinical work and required education. <sup>(Core)</sup>

### **VI.F.3. Maximum Clinical Work and Education Period Length**

VI.F.3.a) Clinical and educational work periods for residents must not exceed 24 hours of continuous scheduled clinical assignments. <sup>(Core)</sup>

VI.F.3.a)(1) Up to four hours of additional time may be used for activities related to patient safety, such as providing effective transitions of care, and/or resident education. <sup>(Core)</sup>

VI.F.3.a)(1)(a) Additional patient care responsibilities must not be assigned to a resident during this time. <sup>(Core)</sup>

### **VI.F.5. Moonlight**

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

\*Core Requirements: Statements that define structure, resource, or process elements essential to every graduate dental 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 dental education.

## **Acknowledgement**

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### **Chairman:**

Dr. Mohamed Jamal

### **Members:**

Dr. Fatima Al Dhefairy

Dr. Keyvan Moharamzadeh

Dr. Mohannad Nassar

Dr. Reem Galadari

Dr. Shaikha Al Samahi

Dr. Zuhair Al Khatib

