# NATIONAL INSTITUTE FOR HEALTH SPECIALITIES

## NIHS Program Requirements for Specialty Education in Burn Surgery (Emirati Board in Burn Surgery)

*The Emirati Board in Burn Surgery 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 physicians 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 philosophical statements are not program requirements and are therefore not citable.*

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## Introduction

### Int. A. Preamble

Fellowship is advanced graduate medical education beyond a core residency program for physicians who desire to enter more specialized practice. Fellowship-trained physicians serve the public by providing subspecialty care, which may also include core medical care, acting as a community resource for expertise in their field, creating and integrating new knowledge into practice, and educating future generations of physicians. Graduate medical education values the strength that a diverse group of physicians brings to medical care.

Fellows who have completed residency are able to practice independently in their core specialty. The prior medical experience and expertise of fellows distinguish them from physicians entering residency training. The fellow's care of patients within the subspecialty is undertaken with appropriate faculty supervision and conditional independence. Faculty members serve as role models of excellence, compassion, professionalism, and scholarship. The fellow develops deep medical knowledge, patient care skills, and expertise applicable to their focused area of practice. Fellowship is an intensive program of subspecialty clinical and didactic education that focuses on the multidisciplinary care of patients. Fellowship education is often physically, emotionally, and intellectually demanding, and occurs in a variety of clinical learning environments committed to graduate medical education and the well-being of patients, residents, fellows, faculty members, students, and all members of the health care team.

In addition to clinical education, many fellowship programs advance fellows' skills as physician-scientists. While the ability to create new knowledge within medicine is not exclusive to fellowship-educated physicians, the fellowship experience expands a physician's abilities to pursue hypothesis-driven scientific inquiry that results in contributions to the medical literature and patient care. Beyond the clinical subspecialty expertise achieved, fellows develop mentored relationships built on an infrastructure that promotes collaborative research.

### Int. B. Definition of Specialty

The Burn Surgery care provides comprehensive medical and surgical treatment of acute burns as well as their sequelae.

The specialists in this field are part of a multi-disciplinary team and are proficient in managing adult and pediatric burns (including electrical, and chemical), lightning injuries, frostbite, exfoliative disorders, burn reconstruction including microsurgery, and the use of skin substitutes and later defects related to sequalae of burn.

They possess an integrated experience in the medical management of both critically ill and non-critically ill burn injuries, their acute operative care and secondary

reconstructive management as well as contractures and contour deformities laser management of post-burn hypertrophic scars.

Surgical care is provided acutely to achieve timely wound closure, stabilize the patient, as well as part of scar reconstruction and rehabilitation.

### Int. C. Length of educational program

The fellowship educational program in burn surgery must be 24 months in length. (Core)

## I. Oversight

### I.A. Sponsoring Institution

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

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

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

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

### I.B. Participating Sites

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

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

I.B.1.a) A Burn surgery fellowship must function as an integral part of an NIHS-accredited program in plastic surgery, adult or pediatric general surgery. (Core)

I.B.1.b) The Sponsoring Institution must establish the burn surgery fellowship within a Burn Center or an administrative unit whose primary mission is the care for burn patients. (Core)

I.B.1.c) Sponsoring Institution must ensure that there are a partnership and close collaboration between the program directors of the parent specialty residency program and fellowship program to ensure compliance with NIHS accreditation requirements. (Core)

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

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

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

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

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

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

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

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

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

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

***Background and Intent:*** *While all fellowship 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 community 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 fellows, of one-month full time equivalent (FTE) or more through NIHS Accreditation System. (Core)

I.B.5. Fellow assignments away from the Sponsoring Institution should not prevent fellows' regular participation in required didactics.

## 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 fellows, residents (if present), faculty members, senior administrative staff members, and other relevant members of its academic community. (Core)

## I.D. Resources

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

I.D.1.a) The Burn Centre should conduct a certain minimal number of acute procedures and follow-up reconstructive surgical procedures per year: (Core)

I.D.1.a)(1) Should admit at least 75 acute burn patients annually, averaged over a three- year period. (Core)

I.D.1.a)(2) Should always have at least 3 acute patients admitted in the center, averaged over a three-year period. (Core)

I.D.1.a)(3) Must have in place its own system of quality control. (Core)

I.D.1.a)(4) Should perform at least 25 follow-up reconstructive surgical procedures annually. (Core)

I.D.1.a)(5) Must treat adults and children with all kinds and extents of burns. (Core)

I.D.1.b) The Burn Centre space and spatial arrangement must include: (Core)

I.D.1.b)(1) Access to an operating room with at least 42 $m^2$, air conditioning, preferably laminar airflow and wide range temperature settings for acute surgical burn treatment. (Core)

I.D.1.b)(1)(a) This operating room must be equipped with all the needs for burn surgery and a respiratory assistance service on a 24-hour basis. (Core)

I.D.1.b)(2) A second theatre devoted to secondary burn reconstruction. (Core)

I.D.1.b)(3) At least 5 acute beds specially equipped and designed for the care of a major burn patient, including: (Core)

I.D.1.b)(3)(a) high room temperature; (Core)

I.D.1.b)(3)(b) climate control; (Core)

I.D.1.b)(3)(c) total isolation facilities; (Core)

I.D.1.b)(3)(d) adequate patient surveillance; (Core)

I.D.1.b)(3)(e) intensive care monitoring facilities. (Core)

I.D.1.b)(4) An established current germ surveillance program. (Core)

I.D.1.b)(5) Include enough regular beds in the adult and children's wards to meet current needs. (Core)

I.D.1.b)(6) equipment of sufficient quality and quantity for specialized burn care. (Core)

I.D.1.b)(6)(a) This includes instruments currently found in surgical operating theatres, intensive care units and standard care wards in addition to specialized knives (Humby, Watson…) and dermatomes (either electric or air driven) mesh and/or meek dermatomes, etc. (Core)

I.D.1.c) The burn center must be situated in a multidisciplinary hospital and: (Core)

I.D.1.c)(1) Should maintain or at least have access to a skin bank. (Core)

I.D.1.c)(2) Must have easy access and cooperate with other departments: (Core)

- Radiology,
- Microbiology,
- Clinical Biochemistry,
- Clinical Hematology,
- Immunology,
- Surgery,
- Neurosurgery,
- Internal Medicine,
- Neurology,
- ENT,
- Ophthalmology,

- Gynecology,
- Urology,
- Psychiatry.
- Cardiology
- Dermatology

I.D.1.d) A burn center must have 24/7 consultant-led burn care and 24/7 access to an operating room for emergent cases. (Core)

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

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

I.D.2.b) safe, quiet, clean, and private sleep/rest facilities available and accessible for fellows with proximity appropriate for safe patient care; (Core)

***Background and Intent:*** *Care of patients within a hospital or health system occurs continually throughout the day and night. Such care requires that fellows' function at their peak abilities, which requires the work environment to provide them with the ability to meet their basic needs within proximity to their clinical responsibilities.*

*Access to food and rest are examples of these basic needs, which must be met while fellows are working. Fellows should have access to refrigeration where food may be stored. Food should be available when fellows are required to be in the hospital overnight. Rest facilities are necessary, even when an overnight call is not required, to accommodate the fatigued fellow.*

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

***Background and Intent:*** *Sites must provide private and clean locations where fellows 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 fellow 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 fellow and the fellow's family.*

I.D.2.d) security and safety measures appropriate to the participating site; (Core)

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

I.D.3. Fellows must have ready access to specialty-specific and other appropriate reference material in print or electronic format. This must include access to electronic medical literature databases with full text capabilities. (Core)

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

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

A fellowship program usually occurs in the context of many learners and other care providers and limited clinical resources. It should be structured to optimize education for all learners present. (Core)

I.E.1. Fellows should contribute to the education of residents in core programs if present. (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 fellows' education is not compromised by the presence of other providers and learners, and that fellows' education does not compromise core residents' education.*

## II. Personnel

### II.A. Program Director

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

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

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

***Background and Intent:*** *While the NIHS recognizes the value of input from numerous individuals in the management of a fellowship, a single individual must be designated as program director and made responsible for the program. This individual will have dedicated time for the leadership of the fellowship, and it is this individual's responsibility to communicate with the fellows, faculty members, DIO, GMEC, and the NIHS. The program director's nomination is reviewed and approved by the GMEC. Final approval of program directors resides with the Central Accreditation Committee.*

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

***Background and Intent**: The success of fellowship programs is generally enhanced by continuity in the program director position. The professional activities required of a program director are unique and complex and take time to master. All programs are encouraged to undertake succession planning to facilitate program stability when there is necessary turnover in the program director position.*

II.A.2. At a minimum, the program director must be provided with the salary support required to devote 30 percent FTE of non-clinical time to the administration of the program. (Core)

***Background and Intent:** Thirty percent FTE is defined as one-and-a-half (1.5) day per week. "Administrative time" is defined as non-clinical time spent meeting the responsibilities of the program director.*

II.A.3. Qualifications of the program director:

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

***Background and Intent:** Leading a program requires knowledge and skills that are established during fellowship and subsequently further developed. The time from completion of fellowship 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.*

II.A.3.b) must be licensed as consultant and have at least three years post fellowship documented experience in burn surgery or with a specialty qualification that is acceptable to the Central Accreditation Committee; (Core)

II.A.3.c) must include current medical licensure and appropriate medical staff appointment; (Core)

II.A.3.d) must include ongoing clinical activity; (Core)

***Background and Intent****: A program director is a role model for faculty members and fellows. 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 fellows.*

II.A.4. Program Director Responsibilities

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

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

II.A.4.a)(1) be a role model of professionalism; (Core)

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

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

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

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

***Background and Intent:*** *The program director may establish a leadership team to assist in the accomplishment of program goals. Fellowship 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 physician and non-physician 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 fellowship program education and at least annually thereafter; (Core)

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

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

***Background and Intent:*** *The program director has the responsibility to ensure that all who educate fellows effectively role model Core Competencies. Working with a fellow 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 fellows.*

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

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

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

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

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

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

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

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

II.A.4.a)(14) provide verification of an individual fellow's completion upon the fellow's request, within 30 days; (Core)

***Background and Intent:*** *Primary verification of graduate medical education is important to credentialing of physicians 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 fellows who have previously completed the program. Fellows 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. (Core)

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

II.A.5.a) For programs with an approved fellow complement of more than fifteen, one of the burn surgery certified core faculty members must be appointed as associate program director to assist the program director with the administrative and clinical oversight of the program. (Core)

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, The APD must not work more than 0.7 FTE in a clinical capacity. (Core)

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

## II.B. Faculty

Faculty members are a foundational element of graduate medical education – faculty members teach fellows how to care for patients. Faculty members provide an important bridge allowing fellows to grow and become practice-ready, ensuring that patients receive the highest quality of care. They are role models for future generations of physicians 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, faculty members improve the 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, fellows, 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 fellows and themselves.

***Background and Intent:*** *"Faculty" refers to the entire teaching force responsible for educating fellows. 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 a sufficient number of faculty members with competence to instruct and supervise all fellows at that location. (Core)

II.B.1.a) The ratio of all faculty to fellows must be a minimum of 1:1. (Core)

II.B.2. Faculty members must:

II.B.2.a) be role models of professionalism; (Core)

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

***Background and Intent:*** *Patients have the right to expect quality, cost-effective care with patient safety at its core. The foundation for meeting this expectation is formed during 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 fellows; (Core)

II.B.2.d) devote sufficient time to the educational program to fulfill their supervisory and teaching responsibilities; (Core)

II.B.2.e) administer and maintain an educational environment conducive to educating fellows; (Core)

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

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

***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 fellowship program faculty in the aggregate.*

II.B.3. Faculty Qualifications

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

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

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

II.B.3.c) Any non-physician faculty members who participate in fellowship program education must be approved by the program director. (Core)

***Background and Intent****: The provision of optimal and safe patient care requires a team approach. The education of fellows by non-physician educators enables the fellows to better manage patient care and provides valuable advancement of the fellows' knowledge. Furthermore, other individuals contribute to the education of the fellow in the basic science of the specialty or in research methodology. If the program director determines that the contribution of a non-physician individual is significant to the education of the fellows, 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 fellows and must devote a significant portion of their entire effort to fellow education and/or administration, and must, as a

component of their activities, teach, evaluate, and provide formative feedback to fellows. (Core)

***Background and Intent****: Core faculty members are critical to the success of fellow education. They support the program leadership in developing, implementing, and assessing curriculum and in assessing fellows' 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 experienced in burn surgery and are designated by the program director. (Core)

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

II.B.4.c) Core faculty to fellow ratio must be 1:2. (Core)

### II.C. Program Coordinator

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

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

***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 fellows.*

*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 fellows 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. (Core)

II.D.1. Specialists from other disciplines must be available for patient care and fellows' education: (Core)

- General surgery,
- Adult and pediatric ICU
- Orthopedic surgery,
- Cardiothoracic surgery,
- Neurosurgery,
- Neurology,
- Internal medicine,
- Infection disease
- ENT
- Ophthalmology
- Urology
- Gynecology
- Psychiatry
- Radiology
- Biochemistry
- Hematology
- Microbiology
- Immunology
- Epidemiology
- Dermatology

II.D.2. In addition to physician personnel there must be available: (Core)

II.D.2.a) a sufficient number of registered, highly skilled nurses experienced in the care of burn patients; (Core)

II.D.2.a)(1) at least one nurse per patient on a Burns ICU bed. (Detail)

II.D.2.b) permanently assigned physical and occupational therapists; (Core)

II.D.2.b)(1) rehabilitation personnel should deal with both in and out patients. (Detail)

II.D.2.c) psychologist available on a daily basis; (Core)

II.D.2.d) a social worker available on a daily basis; (Core)

II.D.2.e) dietician service available for consultation on a daily basis. (Core)

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

## III. Fellows Appointments

### III.A. Eligibility Requirements

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

III.A.1.a) All required clinical education for entry into NIHS-accredited fellowship programs must be completed in a NIHS-accredited residency program, a program with ACGME International (ACGME-I) Advanced Specialty Accreditation, or another structured residency program considered acceptable by Central Accreditation Committee. (Core).

III.A.1.b) Prior to appointment in the fellowship, fellows should have completed a general surgery, pediatric surgery, or plastic surgery program that satisfies the requirements in III.A.1.a). (Core)

III.A.1.b)(1) All candidates must have valid basic life support (BLS) certification and, preferably, advanced cardiac life support (ACLS), pediatric advanced life support (PALS), and advanced trauma life support (ATLS). (Core)

III.A.1.b)(2) Refer to NIHS criteria included in the Training Bylaw. (Core)

III.A.1.c) Fellow Eligibility Exception

The Central Accreditation Committee will allow the following exception to the fellowship eligibility requirements:

III.A.1.c)(1) An NIHS-accredited fellowship program may accept an exceptionally qualified international graduate applicant who does not satisfy the eligibility requirements listed in III.A.1.a), but who does meet all of the following additional qualifications and conditions: (Core)

III.A.1.c)(1)(a) Is eligible for a license of specialist in general surgery, pediatric surgery, or plastic surgery by UAE Health Authority PQR. (Core)

III.A.1.c)(1)(b) Is evaluated by the program director and fellowship selection committee based on prior

training and review of the summative evaluations of training in the core specialty; (Core)

III.A.1.c)(1)(c) The applicant's exceptional qualifications are reviewed and approved of by the GMEC; (Core)

III.A.1.c)(2) Applicants accepted through this exception must have an evaluation of their performance by the Clinical Competency Committee within 12 weeks of matriculation. (Core)

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

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

### III.B. Number of Fellows

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

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

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

III.B.4. The number of available fellow positions in the program must be at least one per year. (Core)

### III.C. Fellows Transfers

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

## IV. Educational Program

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

The educational program must support the development of knowledgeable, skillful physicians who provide compassionate care.

## IV.A. Curriculum Components

The Educational Curriculum must contain the following educational components: (Core)

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

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

IV.A.2.a) These goals and objectives must be distributed and available to fellows and faculty members. (Core)

IV.A.3. Delineation of fellow responsibilities for patient care, progressive responsibility for patient management, and graded supervision in their subspecialty. (Core)

IV.A.4. Structured educational activities beyond direct patient care. (Core)

***Background and Intent**: Patient care-related educational activities, such as morbidity and mortality conferences, tumor boards, surgical planning conferences, case discussions, etc., allow fellows to gain medical knowledge directly applicable to the patients they serve. Programs should define those educational activities in which fellows are expected to participate and for which time is protected.*

IV.A.5. Advancement of fellows' knowledge of ethical principles foundational to medical professionalism. (Core)

## IV.B. Defined Core Competencies

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

IV.B.1.a) Professionalism

Fellows must demonstrate a commitment to professionalism and an adherence to ethical principles. (Core)

IV.B.1.a)(1) Respect the patient, the patient's family, employees, and colleagues. (Core)

IV.B.1.a)(2) Show honesty and openness when discussing treatment options and respect the cultural differences of the patients. (Core)

IV.B.1.a)(3) Respond appropriately to calls, pagers and messages. (Core)

IV.B.1.a)(4) Promote a teamwork culture that recognizes, supports, and effectively deals with colleagues in need during patient care. (Core)

IV.B.1.a)(5) Indicate a commitment to the disclosure and impact of error or adverse events and show your personal responsibilities, including personal care, to provide the best service to others. (Core)

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

Fellows must be able to provide patient care that is appropriate, and effective for the treatment or health problems and the promotion of health. (Core)

IV.B.1.b)(1) In the context of burn care, for adult and pediatric patients, fellows must understand and manage all concepts of safe patient initial transfer and transfer to other facility. (Core)

IV.B.1.b)(2) Fellows must demonstrate competence in providing for the total care of the adult and pediatric patient, including initial evaluation, establishment of diagnosis, selection of appropriate therapy, providing that therapy, and management of complications in collaboration with related specialties. (Core)

IV.B.1.b)(2)(a) Cardiovascular

IV.B.1.b)(2)(a)(i) acute and targeted resuscitation, including optimization of tissue oxygenation in shock (hypovolemic, hemorrhagic, neurogenic, obstructive and distributive shock); (Core)

IV.B.1.b)(2)(a)(ii) selection and administration of a wide range of cardiovascular support, including different types of shock; (Core)

IV.B.1.b)(2)(a)(iii) cardiac arrhythmias and ischemic events; (Core)

IV.B.1.b)(2)(a)(iv) arterial diseases of various etiologies (thrombosis, embolism, aneurysms, etc.); (Core)

IV.B.1.b)(2)(a)(v) various thromboembolic event prevention strategies; (Core)

IV.B.1.b)(2)(a)(vi) compartment syndrome of the limbs, abdomen, and trunk and perform escharotomy, fasciotomy, and decompression laparotomy; (Core)

IV.B.1.b)(2)(a)(vii) multiple organ failure; (Core)

IV.B.1.b)(2)(a)(viii) perform cardiovascular procedures, including: (Core)

- Placement of arterial and venous catheters for hemodynamic monitoring and treatment

IV.B.1.b)(2)(b) Respiratory

IV.B.1.b)(2)(b)(i) diagnose and manage: (Core)

- inhalation injuries and carbon monoxide poisoning;
- acute exacerbations of COPD;
- pulmonary infections (pneumonia, ventilator-acquired pneumonia, pyogenic abscess, pulmonary abscess, trachea-bronchitis);
- acute respiratory distress, including asthma.

IV.B.1.b)(2)(b)(ii) use ventilators and other devices to assist with gas exchange; (Core)

IV.B.1.b)(2)(b)(iii) use various weaning strategies for ventilated patients; (Core)

IV.B.1.b)(2)(b)(iv) airway management (tracheostomy, endotracheal tube, bronchoscopy, and pleural drainage); (Core)

IV.B.1.b)(2)(b)(v) techniques of withdrawal from mechanical ventilation, suction techniques and airway monitoring. (Core)

IV.B.1.b)(2)(c) Gastrointestinal

IV.B.1.b)(2)(c)(i) upper and lower gastrointestinal bleeding; (Core)

IV.B.1.b)(2)(c)(ii) hepato-renal syndrome; (Core)

IV.B.1.b)(2)(c)(iii) ileus; (Core)

IV.B.1.b)(2)(c)(iv) pancreatitis; (Core)

IV.B.1.b)(2)(c)(v) liver cell failure; (Core)

IV.B.1.b)(2)(c)(vi) hepatic encephalopathy; (Core)

IV.B.1.b)(2)(c)(vii) bleeding esophageal varices; (Core)

IV.B.1.b)(2)(c)(viii) intestinal ischemia. (Core)

IV.B.1.b)(2)(d) Endocrine

IV.B.1.b)(2)(d)(i) thyroid, parathyroid, pancreatic, and adrenal disorders; (Core)

IV.B.1.b)(2)(d)(ii) hyperglycemia and diabetes. (Core)

IV.B.1.b)(2)(e) Hematologic

IV.B.1.b)(2)(e)(i) white blood cells, red blood cells, and platelet disorders; (Core)

IV.B.1.b)(2)(e)(ii) heparin-induced thrombocytopenia and thrombosis; (Core)

IV.B.1.b)(2)(e)(iii) bleeding and coagulopathy. (Core)

IV.B.1.b)(2)(f) Neurology

IV.B.1.b)(2)(f)(i) anoxic encephalopathy; (Core)

IV.B.1.b)(2)(f)(ii) acute neurologic problems; (Core)

IV.B.1.b)(2)(f)(iii) abnormalities in sodium homeostasis related to neurological diseases, including diabetes insipidus, syndrome of inappropriate anti-diuretic hormone secretion, and cerebral salt wasting; (Core)

IV.B.1.b)(2)(f)(iv) stroke (ischemic or hemorrhagic). (Core)

IV.B.1.b)(2)(g) Nephrology

IV.B.1.b)(2)(g)(i) oliguria; (Core)

IV.B.1.b)(2)(g)(ii) electrolyte, vascular volume status, and drug dosage in acute kidney injury; (Core)

IV.B.1.b)(2)(g)(iii) absolute indications for renal replacement therapy; (Core)

IV.B.1.b)(2)(g)(iv) dialysis and the basis of electrolyte replacement in renal patients. (Core)

IV.B.1.b)(3) Fellows must demonstrate competence in providing for the total care of the patient, including initial evaluation, establishment of diagnosis, and leading a multidisciplinary team which will further select the appropriate therapy, provide that therapy, and manage the complications in adult and pediatric burn-related trauma. (Core)

IV.B.1.b)(3)(a) initial assessment, triage, and resuscitation of injured patients; (Core)

IV.B.1.b)(3)(b) isolated burn injuries and associated blunt or penetrating trauma; (Core)

IV.B.1.b)(3)(c) intra-abdominal injuries; (Core)

IV.B.1.b)(3)(d) abdominal compartment syndrome; (Core)

IV.B.1.b)(3)(e) pelvic fractures, including associated soft tissue injuries. (Core)

IV.B.1.b)(4) Fellows must demonstrate competence in providing care of the patient, including initial evaluation, establishment of diagnosis, selection of appropriate therapy and management of complications in adult and pediatric burn-related anesthesia. (Core)

IV.B.1.b)(4)(a) general, regional, and local anesthesia; (Core)

IV.B.1.b)(4)(b) perioperative complications; (Core)

IV.B.1.b)(4)(c) device malfunctions before and during anesthesia treatment; (Core)

IV.B.1.b)(4)(d) efficient interpretation of the information obtained from the appropriate

monitors, including invasive and non-invasive blood pressure monitors, 5-lead ECG, muscle relaxation monitoring, oxygen meters, expiratory terminal gas monitors, body temperature, urine volume, and invasive cardiac monitors; (Core)

IV.B.1.b)(4)(e) appropriate selection of fluid and blood products in consideration of indications, contraindications; (Core)

IV.B.1.b)(4)(f) complications associated with the administration of fluids and blood products throughout the perioperative period; (Core)

IV.B.1.b)(4)(g) perioperative pain management strategy. (Core)

IV.B.1.b)(5) Fellows must demonstrate competence in providing comprehensive care of the patient, including initial evaluation, establishment of diagnosis, selection of appropriate therapy, and management of complications in adult and pediatric burn-related wound management: (Core)

IV.B.1.b)(5)(a) assessment of the extent and depth of the injury; (Core)

IV.B.1.b)(5)(b) indications and technique of escharotomy in different body regions; (Core)

IV.B.1.b)(5)(c) all aspects of burn wound excision, tangential and fascial resections; (Core)

IV.B.1.b)(5)(d) burnt hands, face, feet, and perineum; (Core)

IV.B.1.b)(5)(e) wound management in patients with extreme ages (children and the elderly); (Core)

IV.B.1.b)(5)(f) skills in variety of wound-covering options (allogeneic transplants, xenografts, cultured skin products, and skin substitutes); (Core)

IV.B.1.b)(5)(g) antimicrobial dressings, including indications and contraindications; (Core)

IV.B.1.b)(5)(h) dealing with chemical and electrical damage; (Core)

IV.B.1.b)(5)(i) life- threatening skin problems, such as toxic epidermal necrolysis, epidermolysis bullosa,

pemphigus, burn syndrome, and necrotizing fasciitis. (Core)

IV.B.1.b)(6) Fellows must provide comprehensive management of adult and pediatric burn-related infectious disease in collaboration with related specialties: (Core)

IV.B.1.b)(6)(a) patients with fever; (Core)

IV.B.1.b)(6)(b) sepsis, systemic inflammatory response system (SIRS), septic shock, and multiple organ failure; (Core)

IV.B.1.b)(6)(c) strategies for avoiding nosocomial complications; (Core)

IV.B.1.b)(6)(d) perioperative antibiotic prophylaxis; (Core)

IV.B.1.b)(6)(e) management of patients with: (Core)

- ventilator associated pneumonia, central line associated bloodstream infection, catheter associated urinary tract infections;
- necrotic soft tissue infections;
- invasive burn sepsis;
- infections in patients with burns;
- intra-abdominal sepsis.

IV.B.1.b)(6)(f) non-bacterial infections such as fungi, viruses, and other abnormal pathogens; (Core)

IV.B.1.b)(6)(g) patients immuno-compromised by the disease process (HIV infection, diabetes, cirrhosis, etc.) and medications (steroids, chemotherapy, rejection inhibitors, etc.); (Core)

IV.B.1.b)(6)(h) nosocomial infection control methods and isolation polices; (Core)

IV.B.1.b)(6)(i) manage antibiotic treatment in accordance with: (Core)

- appropriate choice and dose adjustments;
- multi-resistance;
- antibiotic levels monitoring.

IV.B.1.b)(7) Fellows must demonstrate competence in providing comprehensive care of the patient, including

initial evaluation and reevaluation and selection of appropriate therapy in adult and pediatric burn-related nutrition/metabolic support: (Core)

IV.B.1.b)(7)(a) continuous assessment of nutritional needs; (Core)

IV.B.1.b)(7)(b) enteral and parenteral nutrition; (Core)

IV.B.1.b)(7)(c) placement of the feeding tubes; (Core)

IV.B.1.b)(7)(d) micronutrients in nutritional support; (Core)

IV.B.1.b)(7)(e) increased metabolic support and reduce catabolism; (Core)

IV.B.1.b)(7)(f) electrolyte abnormalities. (Core)

IV.B.1.b)(8) Fellows must demonstrate competence in providing continuity of adult and pediatric patient care through out-patient clinics. (Core)

IV.B.1.b)(8)(a) post-grafting therapy, immobilization, and pressure therapy; (Core)

IV.B.1.b)(8)(b) wound maturation and hypertrophic scars; (Core)

IV.B.1.b)(8)(c) pain and itching; (Core)

IV.B.1.b)(8)(d) occupational therapy-related topics such as returning to work or school and the need for work retraining. (Core)

IV.B.1.b)(9) Fellows must demonstrate competence in providing comprehensive management of adult and pediatric burn-related rehabilitation: (Core)

IV.B.1.b)(9)(a) joint positioning, splinting, and pressure equipment; (Core)

IV.B.1.b)(9)(b) contractures in different areas, resurfacings, and reconstructions. (Core)

IV.B.1.b)(10) Fellows must demonstrate competence in providing comprehensive management of adult and pediatric burn-related palliative care including: (Core)

IV.B.1.b)(10)(a) non-pharmacological and pharmacological treatment of pain and other

related symptoms (e.g., nausea, dyspnea, cough, hypersecretion); (Core)

IV.B.1.b)(10)(b) resuscitation prohibition guidelines and end-of-life issues, including do not resuscitate (DNR) status. (Core)

IV.B.1.b)(10)(c) different human responses, feelings, attitudes, and beliefs about death. (Core)

IV.B.1.b)(11) Fellows must be able to perform all medical, diagnostic, and surgical procedures considered essential for the area of practice in collaboration with related specialties: (Core)

- Escharotomy
- Emergency fasciotomies (upper extremities and lower extremities)
- Early excision of burns
- Tangential excision
- Fascial excision
- Debridement of infected burn wounds
- Skin grafts (split and full thickness)
- Use of artificial dermal matrix and skin substitutes
- Skin flaps (local, regional, distant, free flap)
- Tissue expansion surgery
- Release of post-burn contractures, including the neck, axilla, knee, elbow, hand, and foot
- Intubation (oral)
- Tracheostomy
- Ventilation of bag and mask
- Suction techniques
- Fiber-optic laryngo-tracheal bronchoscopy
- Weaning techniques
- Management of pneumothorax (needle and chest tube insertion of drainage systems)
- Operation of mechanical ventilators
- Arterial puncture and blood sampling
- Insertion of monitoring central lines
- Cardioversion
- Insertion of hemodialysis catheters

IV.B.1.c) Medical Knowledge

Fellows 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 in following areas: (Core)

IV.B.1.c)(1) emergency management of burns; (Core)

IV.B.1.c)(2) pathophysiology of burn shock and burn edema; (Core)

IV.B.1.c)(3) fluid resuscitation and early management; (Core)

IV.B.1.c)(4) systemic inflammatory response syndrome and multiple organ dysfunction syndrome; (Core)

IV.B.1.c)(5) immune responses and intervention strategies; (Core)

IV.B.1.c)(6) hematological response to burns; (Core)

IV.B.1.c)(7) vitamin, mineral and trace element homeostasis after severe burns; (Core)

IV.B.1.c)(8) modulation of the hyper-metabolism response after burns; (Core)

IV.B.1.c)(9) etiology and prevention of multiple organ failure; (Core)

IV.B.1.c)(10) electrical injury and aspects of their management; (Core)

IV.B.1.c)(11) types of chemical burns and their management; (Core)

IV.B.1.c)(12) all aspects of radiation/cold related injuries; (Core)

IV.B.1.c)(13) all phases of wound healing; (Core)

IV.B.1.c)(14) pathophysiology of burn scars; (Core)

IV.B.1.c)(15) hypertrophic scars and keloids and their management; (Core)

IV.B.1.c)(16) burn infections; (Core)

IV.B.1.c)(17) anesthesia for burn patients.

IV.B.1.c)(18) perioperative care for burn patients; (Core)

IV.B.1.c)(19) functional outcomes and disability assessment; (Core)

IV.B.1.c)(20) burn reconstruction on different body areas (hands, head, neck, scalp, joints, breast, feet and ankles). (Core)

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

Fellows 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. (Core)

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

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

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

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

IV.B.1.f)(1) Show proficiency in implementing clinical protocols for the care of critically ill patients. (Core)

IV.B.1.f)(2) Demonstrate an understanding of institutional, regional, and national civil protection protocols. (Core)

IV.B.1.f)(3) Show an understanding of ICU management, including costs, fees, proper coding, billing, and collection monitoring. (Core)

IV.B.1.f)(4) Demonstrate an understanding of national regulations and laws governing care practices and medical law issues. (Core)

IV.B.1.f)(5) Show an understanding of the criteria used to recruit, promote, and maintain staff. (Core)

## IV.C. Curriculum Organization and Fellow Experiences

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

IV.C.1.a) Assignment of rotations must be structured to minimize the frequency of rotational transitions, and rotations must be of

sufficient length to provide a quality educational experience, defined by continuity of patient care, ongoing supervision, longitudinal relationships with faculty members, and meaningful assessment and feedback. (Core)

IV.C.1.b) Clinical experiences should be structured to facilitate learning in a manner that allows fellows to function as part of an effective interprofessional team that works together towards the shared goals of patient safety and quality improvement. (Core)

IV.C.2. The program must provide instruction and experience in pain management if applicable in Burn Surgery, including recognition of the signs of addiction. (Core)

IV.C.3. The fellowship core curriculum must cover: (Core)

IV.C.3.a) Pre-burn center care. (Core)

Triage and coordination of transfer of burn injured patients, collaboration with referring providers to develop a plan of care with input into pre-hospital care and systems of care.

IV.C.3.b) Resuscitation and cardiovascular physiology. (Core)

- Management of acute burn resuscitation, prevention of, and rescue of burn shock;
- Diagnosis, monitoring and management of dysrhythmia, and all types of shock;
- Competency in the management of acute kidney injury, metabolic disturbances, and the use of renal replacement therapies.

IV.C.3.c) Inhalation injury and respiratory failure. (Core)

- Diagnosis and management of inhalation injury, carbon monoxide and cyanide poisonings;
- Airway management;
- Interpretation of radiologic and laboratory data;
- Advanced mechanical ventilation strategies;
- Bronchoscopy;
- Management of complications.

IV.C.3.d) Wound management. (Core)

- Diagnosis and management of different injury depths and etiologies, performance of escharotomy and fasciotomy, topical wound care and debridement;

- Develop expertise in surgical wound preparation including specialized areas (face, neck, hands, perineum/genitalia, feet), application of skin substitutes, and skin grafting.

IV.C.3.e) Infection. (Core)

- Diagnosis and management of common ICU and burn-related infections;
- Antibiotic choice and stewardship;
- Development and maintenance of sound infection control practices.

IV.C.3.f) Nutrition. (Core)

- Management of nutritional priorities in burn injured patients;
- Assessment of nutritional status;
- Management of enteral and parenteral nutrition;
- Use of metabolic agents to mitigate hypermetabolism.

IV.C.3.g) Pharmacology. (Core)

- Understanding of appropriate choice and dosing of medications;
- Burn hypermetabolism effects;
- Drug interactions.

IV.C.3.h) Psychosocial. (Core)

- Understanding of psychological stressors and common psychiatric diagnoses in the burn-injured patient;
- Understanding the role of psychological colleagues and social services available;
- Diagnosis and referral of cases of suspected abuse and addiction.

IV.C.3.i) Ethics and palliative care. (Core)

- Integration of ethical principles and palliation into curative care;
- Promotion of patient- and family-centered care;
- Management of end-of-life care including DNR status.

IV.C.3.j) Rehabilitation. (Core)

- Collaboration with therapy specialists in formulating a plan of care;
- Understanding principles of positioning, splinting and exercise;

- Understanding of the role of inpatient and outpatient rehabilitation services.

IV.C.3.k) Outpatient management. (Core)

- Safe transition to outpatient care, wound care, pain and itch management;
- Hypertrophic scar diagnosis and management;
- Accessing psychosocial resources.

IV.C.3.l) Basic reconstruction. (Core)

- Understanding factors in scar formation;
- Planning and performance of multiple reconstruction techniques (scar excision, tissue rearrangement, basic skin flaps, and laser/injection therapies).

IV.C.3.m) Administration and quality improvement. (Core)

- Development and maintenance of clinical protocols, review of quality improvement concerns, monitoring outcomes and reporting of complications, loop closure;
- Understanding of institutional and burn center specific disaster protocols and strategies.

IV.C.3.n) Pediatric care. (Core)

- Familiarity in pediatric aspects of airway and ventilator management, burn resuscitation, pain and sedation strategies, pharmacology, nutrition, rehabilitation, and exposure to non-burn skin and soft tissue diseases seen in the burn center.

IV.C.4. Academic activities must include a formal didactic curriculum, multidisciplinary burn rounds, plastic surgery journal club, cadaveric anatomic dissections and a formal animal microsurgery training course. (Core)

IV.C.4.a) The fellow will also be expected to be actively involved in resident and medical student education both through didactic and clinical teaching. (Core)

IV.C.5. A minimum of 4 hours of formal training hours should be booked each week. (Core)

IV.C.5.a) If applicable, core subjects should include workshops, team-based learning, and simulations. (Core)

IV.C.5.b) The didactic curriculum should be organized as 40 half-day formal sessions each year and remaining time to be dedicated

to journal clubs, morbidity and mortality conference, and regular quality improvement meetings that are burn-specific. (Core)

IV.C.6. The training period in burn surgery must include: (Core)

IV.C.6.a) Eighteen blocks in the primary service burn surgery unit. (Core)

IV.C.6.a)(1) If needed, to the discretion of program director, part of this rotation may be spent on general surgery, plastic surgery or pediatric surgery sub-rotations to cover gaps from previous specialty experiences. (Core)

IV.C.6.b) Two blocks in adult general critical care unit (surgical, medical ICU). (Core)

IV.C.6.c) Two blocks in pediatric general critical care unit. (Core)

IV.C.6.d) Two blocks in a selective rotation. (clinical nutrition, ID, rehabilitation, pain management). (Core)

IV.C.6.e) The program must ensure participation of fellows in Regular outpatient clinics. (Core)

IV.C.7. The minimum case requirements for the completion of fellowship training must be: (Core)

IV.C.7.a) Burn and soft tissue operative cases (125 individual cases, not CPT codes): (Core)

- fasciotomy,
- surgical debridement,
- wound bed preparation,
- application of skin substitutes,
- skin grafting,
- amputations,
- basic reconstruction.
- Up to 10 laser procedures can count toward this requirement.

IV.C.7.b) Escharotomy (10 separate incisions). (Core)

IV.C.7.c) Resuscitation (10 definitive resuscitations for patients with 20% TBSA burns). (Core)

IV.C.7.d) Inhalation injury (10 patients):

- diagnosis,
- active management in the ICU. (Core)

IV.C.7.e) Non-operative burn management (50 patients):

- plan of care,
- topical therapy,
- transition to outpatient care. (Core)

IV.C.7.f) Outpatient visits (200) include:

- acute burns,
- healed burns,
- reconstruction,
- management of late effects. (Core)

**IV.D. Scholarship**

Medicine is both an art and a science. The physician 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 fellow participation in scholarly activities. Scholarly activities must include discovery, integration, application, and teaching.

IV.D.1. Program Responsibilities

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

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

IV.D.2. Faculty Scholarly Activity

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

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

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

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

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

IV.D.3. Fellow Scholarly Activity

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

IV.D.3.b) Fellows must participate in scholarly projects. (Core)

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

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

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

## V. Evaluation

### V.A. Fellow Evaluation

V.A.1. Feedback and Evaluation

Formative and summative evaluation have distinct definitions.

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

More specifically, formative evaluations help:

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

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

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

V.A.1.a) Faculty members must directly observe, evaluate, and frequently provide feedback on fellow performance during each rotation or similar educational assignment. (Core)

This feedback will allow for the development of the learner as they strive to achieve the Milestones. More frequent feedback is strongly encouraged for fellows who have deficiencies that may result in a poor final rotation evaluation.

V.A.1.a)(1) The faculty must discuss this evaluation with each fellow at the completion of each assignment. (Core)

V.A.1.a)(2) Assessment of procedural competence should include a formal evaluation process and not be based solely on a minimum number of procedures performed. (Detail)

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

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

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

V.A.1.b)(3) Longitudinal experiences, such as continuity clinic in the context of other clinical responsibilities, must be evaluated at least every three months and at completion. (Core)

V.A.1.c) The program must provide an objective performance evaluation based on the Competencies and the specialty-specific Milestones, and must: (Core)

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

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

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 fellow their documented semi-annual evaluation of performance, including progress and the specialty-specific Milestones (Core)

V.A.1.d)(1)(a) Review of fellow Case-Logs must be a part of the semi-annual review. (Detail)

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

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

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

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

V.A.1.g) Fellows' promotion.

V.A.1.g)(1) This postgraduate structured educational program in burn surgery is divided into two parts: junior

training year (first year) and senior training year (second year). (Core)

V.A.1.g)(2) The promotion to senior training year, mandates the junior fellow passes the recommended evaluations and assessments, and gives the fellow a chance to gain progressive responsibility. (Core)

V.A.2. Final Evaluation

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

V.A.2.a)(1) The burn surgery-specific Milestones, and when applicable the specific Case Logs, must be used as tools to document performance and verify that the fellow 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 burn surgery. (Core)

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

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

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

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

V.A.2.a)(2)(d) be shared with the fellow upon completion of the program. (Core)

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

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. (Core)

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 fellows. (Core)

V.A.3.a)(2) The Program Director has final responsibility for fellow evaluation and promotion decisions. (Core)

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

V.A.3.b)(1) Review all fellows evaluation at least semi-annually; (Core)

V.A.3.b)(2) determine each fellow's progress on achievement of the specialty-specific Milestones; and, (Core)

V.A.3.b)(3) meet prior to the fellows' semi-annual evaluations and advise the program director regarding each fellow's progress. (Core)

**V.B. Faculty Evaluation**

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

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

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

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

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

**V.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. (Core)

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

The Program Evaluation Committee must present the Annual Program Evaluation Report in a written form to be discussed with all program faculty and fellows 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 fellow. (Core)

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; (Core)

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; (Core)

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

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. (Core)

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; (Core)

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

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

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

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

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

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

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

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

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

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

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

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

V.C.1.c)(6)(a) achievement of the Milestones; (Core)

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

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

V.C.1.c)(6)(d) 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 fellows; (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.

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

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

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

V.C.3.a) Under the guidance of the Program Director all eligible program graduates should take the certifying examination conducted by the NIHS to obtain the Certification. (Outcome)

V.C.3.b) Graduates are eligible to sit for the Certification examination for up to three years from the date of completion of fellowship training. (Outcome)

V.C.4. During the fellowship, the fellows are strongly encouraged to sit for an organized Annual In-Training Examination. (Detail)

## VI. The Learning and Working Environment

Fellowship 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 fellows today
- Excellence in the safety and quality of care rendered to patients by today's fellows 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 physicians
  - the joy of curiosity, problem-solving, intellectual rigor, and discovery
- Commitment to the well-being of the fellows, 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 physicians share responsibility for promoting patient safety and enhancing quality of patient care. Program must prepare fellows 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 fellows 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.

Fellows 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 fellows will apply these skills to critique their future unsupervised practice and effect quality improvement measures.

It is necessary for fellows 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 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 system-based changes to ameliorate patient safety vulnerabilities.

VI.A.1.a)(3)(a) 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) Fellows 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) Fellow Education and Experience in Disclosure of Adverse Events

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

VI.A.1.a)(4)(a) All fellows must receive training in how to disclose adverse events to patients and families. (Core)

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

VI.A.1.b) Quality Improvement

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

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

Fellows must receive training and experience in quality improvement processes, including an understanding of health care disparities. (Core)

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

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

Fellows and faculty members must receive data on quality metrics and benchmarks related to their patient populations. (Core)

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

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

Fellows must have the opportunity to participate in inter-professional quality improvement activities. (Core)

VI.A.2. Supervision and Accountability

VI.A.2.a) Although the attending physician is ultimately responsible for the care of the patient, every physician 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 fellowship medical education provides safe and effective care to patients; ensures each fellow'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 physician who is responsible and accountable for the patient's care. (Core)

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

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

VI.A.2.b) Supervision may be exercised through a variety of methods. For some aspects of patient care, the supervising physician may be a more advanced fellow. Other portions of care provided by the fellow can be adequately supervised by the appropriate availability of the supervising faculty member, or senior fellow physician, 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 fellow-delivered care with feedback.

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

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

VI.A.2.c) Levels of Supervision

To promote appropriate fellow supervision while providing for graded authority and responsibility, the program must use the following classification of supervision: (Core)

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

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

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

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

VI.A.2.d)(1) The program director must evaluate each fellow' abilities based on specific criteria, guided by the Milestones. (Core)

VI.A.2.d)(2) Faculty members functioning as supervising physicians must delegate portions of care to fellows based on the needs of the patient and the skills of each fellow. (Core)

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

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

Each fellow must know the limits of their scope of authority, and the circumstances under which the fellow is permitted to act with conditional independence. (Outcome)

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

### VI.B. Professionalism

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

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

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

VI.B.2.b) be accomplished without excessive reliance on fellows to fulfill non-physician 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. Fellows 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 fellow.*

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 fellows 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 fellows, faculty, and staff. (Core)

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

**VI.C. Well-Being**

Psychological, emotional, and physical well-being are critical in the development of a competent, caring, and resilient physician and require proactive attention to life inside and outside of medicine. Well-being requires that physicians retain joy in medicine 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 fellowship training.

Fellows 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 fellow competence. Physicians and all members of the 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 fellows 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 fellow finds in the experience of being a physician, including protecting time

with patients, minimizing non-physician obligations, providing administrative support, promoting progressive autonomy and flexibility, and enhancing professional relationships; (Core)

VI.C.1.b) attention to scheduling, work intensity, and work compression that impacts fellow well-being; (Core)

VI.C.1.c) evaluating workplace safety data and addressing the safety of fellows and faculty members; (Core)

VI.C.1.d) policies and programs that encourage optimal fellow and faculty member well-being; (Core)

VI.C.1.e) attention to fellow and faculty member burnout, depression, and substance use disorders.

The program, in partnership with its Sponsoring Institution, must educate faculty members and fellows in identification of the symptoms of burnout, depression, and substance use disorders, including means to assist those who experience these conditions. Fellows 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: (Core)

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

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

VI.C.1.e)(3) provides 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. (Core)

VI.C.2. There are circumstances in which fellows 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 fellows unable to perform their patient care responsibilities. (Core)

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

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

***Background and Intent:*** *Fellows 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 fellows to recognize the signs of fatigue and sleep deprivation; (Core)

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

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

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

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

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

VI.E.1. Clinical Responsibilities

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

VI.E.2. Teamwork

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

VI.E.3. Transitions of Care

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

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

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

VI.E.3.d) Programs and clinical sites must maintain and communicate schedules of attending physicians and fellows currently responsible for care. (Core)

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

## VI.F. Clinical Experience and Education

Programs, in partnership with their Sponsoring Institutions, must design an effective program structure that is configured to provide fellows 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. (Core)

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 fellows with educational opportunities, as well as reasonable opportunities for rest and personal well-being. (Core)

VI.F.2.b) Fellows should have eight hours off between scheduled clinical work and education periods. (Detail)

There may be circumstances when fellows choose to stay to care for their patients or return to the hospital with fewer than eight hours free of clinical experience and education. This must occur within the context of the 80-hour and the one-day-off-in-seven requirements. (Detail)

VI.F.2.c) Fellows must have at least 14 hours free of clinical work and education after 24 hours of in-house call. (Core)

VI.F.2.d) Fellows must be scheduled for a minimum of one day in seven free of clinical work and required education (when averaged over four weeks). At-home call cannot be assigned on these free days. (Core)

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

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

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 fellow education. (Core)

VI.F.3.a)(1)(a) Additional patient care responsibilities must not be assigned to a fellow during this time. (Core)

VI.F.4. Clinical and Educational Work Hour Exceptions

VI.F.4.a) In rare circumstances, after handing off all other responsibilities, a fellow, on their own initiative, may elect to remain or return to the clinical site in the following circumstances:

VI.F.4.a)(1) to continue to provide care to a single severely ill or unstable patient; (Detail)

VI.F.4.a)(2) humanistic attention to the needs of a patient or family; or, (Detail)

VI.F.4.a)(3) to attend unique educational events. (Detail)

VI.F.4.b) These additional hours of care or education will be counted toward the 80-hour weekly limit. (Detail)

VI.F.5. Moonlight

Fellows are not permitted to moonlight. (Core)

VI.F.6. In-House Night Float

Night float must occur within the context of the 80-hour and one- day-off-in-seven requirements. (Core)

VI.F.7. Maximum In-House On-Call Frequency

Fellows must be scheduled for in-house call no more frequently than every third night (when averaged over a four-week period). (Core)

VI.F.8. At-Home Call

VI.F.8.a) Time spent on patient care activities by fellows on at-home call must count toward the 80-hour maximum weekly limit. (Core)

VI.F.8.b) Fellows are permitted to return to the hospital while on at- home call to provide direct care for new or established patients. These hours of inpatient patient care must be included in the 80-hour maximum weekly limit. (Detail)

*Core Requirements: Statements that define structure, resource, or process elements essential to every graduate medical 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 fellows at key stages of their graduate medical education.

**References:**


1. Burn Surgery and Critical Care Fellowship. Saudi Arabia
https://scfhs.org.sa/sites/default/files/2022-05/6475%20BURN_CRITICAL_CARE_FELLOWSHIP-2022.pdf

2. BEERTHUIZEN Gerard, MAGNETTE André Vienna/Austria EBA Congress Edition. European Burns Association. European Practice Guidelines for Burn Care. Minimum level of Burn Care Provision in Europe
http://www.euroburn.org

https://www.euroburn.org/wp-content/uploads/EBA-Guidelines-Version-4-2017.pdf?utm

3. Plastic Surgery and Burn Therapy Training Program, Spain
https://pyreneesworldtravels.com/en/formaciones/plastic-surgery-and-burn-therapy-training-program-for-european-resident-physicians-only/

4. Burn fellowship. University of Chicago, USA
https://surgery.uchicago.edu/education/burn-fellowship

5. Fellowship Verification Criteria. American Burns Association
https://ameriburn.org/quality-care/verification-burn-fellowship-training-program/fellowship-verification-criteria/

6. Plastic Surgery Syllabus, UK
https://www.iscp.ac.uk/static/public/syllabus/syllabus_plas_2010.pdf

7. Total Burn Care (Acute & Reconstructive Surgery) Fellowship McMaster University and Hamilton Health Sciences
https://surgery.healthsci.mcmaster.ca/wp-content/uploads/2024/06/McMaster-University-Burn-Care-2023-0627.pdf

8. Fellowship in Acute Burn Care and Microvascular Reconstruction (Adult and Pediatric), University of Alberta
https://www.ualberta.ca/en/surgery/divisions/plastic-surgery/fellowship.html

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