

Program Requirements for Graduate Medical Education In Procedural Dermatology

Common Program Requirements are in BOLD

Effective: February 2003

I. Introduction

I.A. Definition and scope of subspecialty

Procedural Dermatology is the subspecialty within dermatology that is concerned with the study, diagnosis, and surgical treatment of diseases of the skin and adjacent mucous membranes, cutaneous appendages, hair, nails, and subcutaneous tissue. Dermatologic surgical procedures are minimally invasive and may be safely performed in outpatient settings without general anesthesia or other intravascular physiologic alteration. An especially important technique is Mohs micrographic surgical excision, which is used for certain cancers of the skin and incorporates training in clinical dermatology and dermatopathology as they apply to dermatologic surgery. In addition, cutaneous reconstruction of surgical defects, sclerotherapy, chemical peel, hair transplantation, dermabrasion, small-volume liposuction, cutaneous soft tissue augmentation with injectable filler material, rhinophyma correction, and laser surgery are important components of these fellowships.

I.B. Duration and scope of education

I.B.1. Procedural Dermatology fellowships will be accredited to offer 12 months of education and experience subsequent to the satisfactory completion of an Accreditation Council for Graduate Medical Education (ACGME)-accredited residency in Dermatology, when all residents are required to develop initial competence in dermatologic surgery.

I.B.2. Graduate medical education programs in procedural dermatology must provide an organized, systematic, and progressive educational experience for physicians seeking to acquire advanced competence as a dermatologic surgeon.

I.B.3. Programs must provide organized education in all current aspects of procedural dermatology, including basic science, anatomy, anesthesia, ethics, pre- and post-operative management, surgical technique, wound healing, Mohs micrographic surgery, laboratory technique, interpretation of pathologic specimens related to Mohs micrographic surgery, cutaneous reconstruction of surgical defects, sclerotherapy, chemical peel, hair transplantation, dermabrasion, small-volume liposuction, cutaneous soft tissue augmentation with injectable filler material, rhinophyma correction, cutaneous oncology, laser surgery, epidemiology, medicolegal and regulatory issues, quality assurance, and self-assessment.

II. Institutions

II.A. Sponsoring Institution

One sponsoring institution must assume the ultimate responsibility for the program as described in the Institutional Requirements, and this responsibility extends to fellow assignments at all participating institutions.

II.A.1. Most procedural dermatology fellowships will be sponsored by institutions that also sponsor ACGME-accredited residency programs in dermatology. Programs that are not affiliated with a dermatology residency will also be eligible for accreditation if they are able to document compliance with the ACGME's Institutional Requirements as well as those for Procedural Dermatology.

II.B. Participating Institutions

II.B.1. Assignment to an institution must be based on a clear educational rationale, integral to the program curriculum, with clearly-stated activities and objectives. When multiple participating institutions are used, there should be assurance of the continuity of the educational experience.

II.B.2. Assignment to a participating institution requires a letter of agreement with the sponsoring institution. Such a letter of agreement should:

II.B.2.a) identify the faculty who will assume both educational and supervisory responsibilities for fellows;

II.B.2.b) specify their responsibilities for teaching, supervision, and formal evaluation of fellows, as specified later in this document;

II.B.2.c) specify the duration and content of the educational experience; and

II.B.2.d) state the policies and procedures that will govern fellow education during the assignment.

III. Program Personnel and Resources

III.A. Program Director

III.A.1. There must be a single program director responsible for the program. The person designated with this authority is accountable for the operation of the program. In the event of a change of either program director or department chair, the program director should promptly notify the executive director of the RRC through the Web

Accreditation Data System of the ACGME.

- III.A.2.** The Program Director, together with the faculty, is responsible for the general administration of the program, and for the establishment and maintenance of a stable educational environment. Adequate lengths of appointment for both the program director and faculty are essential to maintaining such an appropriate continuity of leadership.
- III.A.3.** Qualifications of the program director are as follows:
- III.A.3.a)** The program director must possess the requisite specialty expertise, as well as documented educational and administrative abilities.
- III.A.3.b)** The program director must be certified in the specialty by the American Board of Dermatology, or possess qualifications judged to be acceptable by the RRC.
- III.A.3.c)** The program director must be appointed in good standing and based at the primary teaching site.
- III.A.3.d)** The program director must have completed a formal, 12-month PGY-5 fellowship in dermatologic surgery or appropriate clinical experience.
- III.A.3.e)** The program director must have at least five years of patient care experience as a dermatologist and dermatologic surgeon.
- III.A.3.f)** The program director must have at least five years of experience as a teacher in graduate medical education in dermatology and dermatologic surgery as well as an ongoing clinical practice in dermatologic surgery.
- III.A.4.** Responsibilities of the program director are as follows:
- III.A.4.a)** The program director must oversee and organize the activities of the educational program in all institutions that participate in the program. This includes selecting and supervising the faculty and other program personnel at each participating institution, appointing a local site director, and monitoring appropriate fellow supervision at all participating institutions.
- III.A.4.b)** The program director is responsible for preparing an accurate statistical and narrative description of the program as requested by the RRC, as well as updating annually both program and fellow records through the ACGME's Accreditation Data System.

III.A.4.c) The program director must ensure the implementation of fair policies, grievance procedures, and due process, as established by the sponsoring institution and in compliance with the Institutional Requirements.

III.A.4.d) The program director must seek the prior approval of the RRC for any changes in the program that may significantly alter the educational experience of the fellows. Such changes, for example, include:

III.A.4.d).(1) the addition or deletion of a participating institution;

III.A.4.d).(2) a change in the format of the educational program;

III.A.4.d).(3) a change in the approved fellow complement for those specialties that approve fellow complement.

On review of a proposal for any such major change in a program, the RRC may determine that a site visit is necessary.

III.A.4.e) Committing sufficient time (at least 20 hours a week) to the administrative and teaching tasks inherent in achieving the educational goals of the program.

III.B. Faculty

III.B.1. At each participating institution, there must be a sufficient number of faculty with documented qualifications to instruct and supervise adequately all fellows in the program.

III.B.1.a) All programs should have at least two faculty who are actively involved in the clinical practice of procedural dermatology and have significant responsibility for the instruction and supervision of all fellows during the 12 months of accredited education.

III.B.1.b) In the short-term absence of the program director, one member of the teaching staff must assume the responsibility for the direction of the program.

III.B.2. The faculty, furthermore, must devote sufficient time to the educational program to fulfill their supervisory and teaching responsibilities. They must demonstrate a strong interest in the education of fellows, and must support the goals and objectives of the educational program of which they are a member.

III.B.3. Qualifications of the physician faculty are as follows:

The physician faculty must possess the requisite specialty expertise and competence in clinical care and teaching abilities, as well as documented educational and administrative abilities and experience

in their field.

III.B.3.a).(1) Members of the teaching staff who have responsibility for fellow education in Mohs micrographic surgery must have completed a 12-month PGY-5 dermatologic surgery fellowship or have appropriate clinical experience.

III.B.3.b) **The physician faculty must be certified in the specialty by the American Board of Dermatology, or possess qualifications judged to be acceptable by the RRC.**

III.B.3.c) **The physician faculty must be appointed in good standing to the staff of an institution participating in the program.**

III.B.4. **The responsibility for establishing and maintaining an environment of inquiry and scholarship rests with the faculty, and an active research component must be included in each program. *Scholarship* is defined as the following:**

III.B.4.a) **the scholarship of discovery, as evidenced by peer-reviewed funding or by publication of original research in a peer-reviewed journal;**

III.B.4.b) **the scholarship of dissemination, as evidenced by review articles or chapters in textbooks;**

III.B.4.c) **the scholarship of application, as evidenced by the publication or presentation of, for example, case reports or clinical series at local, regional, or national professional and scientific society meetings.**

Complementary to the above scholarship is the regular participation of the teaching staff in clinical discussions, rounds, journal clubs, and research conferences in a manner that promotes a spirit of inquiry and scholarship (e.g., the offering of guidance and technical support for fellows involved in research such as research design and statistical analysis); and the provision of support for fellows' participation, as appropriate, in scholarly activities.

III.B.5. **Qualifications of the nonphysician faculty are as follows:**

III.B.5.a) **Nonphysician faculty must be appropriately qualified in their field.**

III.B.5.b) **Nonphysician faculty must possess appropriate institutional appointments.**

III.C. **Other Program Personnel**

Additional necessary professional, technical, and clerical personnel must

be provided to support the program.

- III.C.1. As the care of patients with skin diseases involves collaboration with other specialties, fellows must have an opportunity to work with health care personnel from Dermatology, Dermatopathology, Medical Oncology, Pathology, and Radiation Therapy. Fellow experience would be enhanced by interaction with General Surgery, Ophthalmology, Orthopaedic Surgery, Otolaryngology, Plastic Surgery, Podiatry, and Prosthetics.

III.D. Resources

The program must ensure that adequate resources (e.g., sufficient laboratory space and equipment, computer and statistical consultation services) are available.

- III.D.1. Adequate space should be dedicated to the performance of dermatologic surgery procedures; this must include a Mohs micrographic frozen section laboratory and examination areas for surgical patients.
- III.D.2. The frozen section laboratory should be in close proximity to the operating suite or rooms in which dermatologic surgery is performed. The technician must be proficient in performing histologic sections.
- III.D.3. Program laboratories should be in compliance with all federal, state and local regulations regarding a work environment (eg, OSHA and CLIA).
- III.D.4. There should be appropriate space for fellows to read, study, and complete their paperwork.

IV. Fellow Appointments

IV.A. Eligibility Criteria

The program director must comply with the criteria for fellow eligibility as specified in the Institutional Requirements.

IV.B. Number of Fellows

The RRC will approve the number of fellows based upon established written criteria that include the adequacy of resources for fellow education (e.g., the quality and volume of patients and related clinical material available for education), faculty-fellow ratio, institutional funding, and the quality of faculty teaching.

IV.C. Fellow Transfers

To determine the appropriate level of education for fellows who are transferring from another program, the program director must receive written verification of previous educational experiences and a statement regarding the performance evaluation of the transferring fellow prior to

their acceptance into the program. A program director is required to provide verification of education for fellows who may leave the program prior to completion of their education.

IV.D. Appointment of Other Students

The appointment of fellows from other programs, residents or students must not dilute or detract from the educational opportunities available to regularly appointed fellows.

V. Program Curriculum

V.A. Program Design

V.A.1. Format

The program design and sequencing of educational experiences will be approved by the RRC as part of the review process.

V.A.2. Goals and Objectives

The program must possess a written statement that outlines its educational goals with respect to the knowledge, skills, and other attributes of fellows for each major assignment and for each level of the program. This statement must be distributed to fellows and faculty, and must be reviewed with fellows prior to their assignments.

V.B. Subspecialty Curriculum

The program must possess a well-organized and effective curriculum, both didactic and clinical. The curriculum must also provide fellows with direct experience in progressive responsibility for patient management.

V.B.1. Didactic components

V.B.1.a) Programs must be structured so that fellows are involved in procedural dermatology throughout the year and must include the systematic study of the body of knowledge which dermatologists have utilized in the development of surgical procedures that may be safely performed in an outpatient setting to treat disorders of the integumentary system. In particular, evaluation and surgical intervention for skin disease is based on an advanced understanding of cutaneous structure and function, cutaneous pathophysiology, clinical dermatology, and clinical dermatopathology as they are related to dermatologic surgery procedures. Procedural dermatology is broadly categorized into the following three areas:

V.B.1.a).(1) Cutaneous oncologic surgery incorporates medical, surgical, and dermatopathological knowledge of cutaneous neoplasms. The fellow is expected to develop in-depth knowledge and abilities in the clinical diagnosis, biology, and pathology of skin tumors as well as laboratory interpretation related to surgical treatment. Further, they must become skilled at the early identification of benign premalignant and malignant skin lesions through morphologic recognition visually as well as with the use of tools such as Woods lamp examination, epiluminescent microscopy and confocal microscopy.

V.B.1.a).(2) Cutaneous reconstructive surgery includes the repair of skin defects that result from the surgical removal of tumors or other skin disease and scar revision, and is based upon a knowledge of cutaneous wound healing and repair techniques.

V.B.1.a).(3) Cutaneous cosmetic surgery incorporates medical, surgical, and dermatopathologic knowledge of cutaneous disorders and the aging of the skin. It focuses on the study and performance of procedures that have been developed by dermatologists to improve the appearance of the skin and control cutaneous disease.

V.B.1.b) Fellows must also expand their knowledge of related disciplines such as surgical anatomy, sterilization of equipment, aseptic technique, anesthesia (including preoperative sedation, local and regional anesthesia, and indications for conscious sedation and general anesthesia), closure materials (sutures, staples), and instrumentation. Appropriate evaluation and management skills must be mastered for all cutaneous surgical patients regardless of diagnosis, including preoperative, perioperative, and postoperative evaluation. Training with certification in advanced cardiopulmonary resuscitation is required. Training in wound healing, including basic science, clinical aspects, and the use of specialized wound dressings appropriate to the clinical problem must be provided.

V.B.1.c) Lectures, tutorials, seminars, and conferences with clinical services must be regularly scheduled and held. There must be systematic study of the body of knowledge upon which dermatologic surgical procedures are based as well as the review of study materials and files of usual and unusual cases.

V.B.2. Clinical components

V.B.2.a) Surgical Volume

The program must provide a sufficient volume and variety of surgical cases for the fellow to acquire the experience of a

subspecialist in procedural dermatology. Program faculty must collectively perform at least 1000 dermatologic surgical procedures per fellow per year. At least 500 of that minimum total must be Mohs micrographic excisions per fellow per year.

V.B.2.b)

Selection and Referral of Patients

The program must be designed to ensure that fellows develop an advanced competence in the identification of patients whose conditions should be treated by minimally invasive dermatologic surgical procedures and others, such as those requiring general anesthesia, who should be referred to other specialists such as ophthalmologists, orthopaedic surgeons, general surgeons, otolaryngologists, or plastic surgeons, who typically use techniques that are more invasive and are designed to treat diseases and conditions involving cartilage, bone, muscle, vessels, and nerves as well as skin.

V.B.2.c)

Procedural Skills

The program must be designed to ensure that all fellows develop advanced skills in the performance of destruction techniques (electrosurgical, cryosurgical, chemical, and laser), excision (of skin cancers, warts, and other skin lesions followed by a layered closure), and Mohs micrographic surgery (for removal of basal cell and squamous cell carcinomas). In addition, the educational program should include instruction in hair transplantation (typically a staged procedure of grafts containing 1 to 15 hairs during a session that includes 50 to 500 grafts), skin rejuvenation techniques (to remove wrinkles or age spots using dermabrasion, chemical peel, laser resurfacing, or rhinophyma correction), laser surgery (typically for removal of a wart, tattoo, or port wine stain), laser phototherapy, nail surgery (typically to remove a nail, destroy the nail matrix, or perform a biopsy), small-volume tumescent liposuction, cutaneous soft tissue augmentation with injectable filler material, and sclerotherapy (injection of fluids into vessels typically less than 1 mm in diameter in the leg).

V.B.2.c).(1)

A knowledge of the principles of and the provision of practical training in electrosurgery for benign and malignant lesions (electrocoagulation, electrofulguration, electrodesiccation, electrosection, electrocautery), cryosurgery, curettage and electrosurgery, scalpel surgery, and Mohs micrographic surgery are mandatory. Experience in staged reconstruction techniques, chemical destructive techniques, nail surgery, grafts, local flaps, sclerotherapy, laser surgery, wedge excision (lip and ear), and closures is also required.

V.B.2.c).(2)

Procedures of an aesthetic nature should be taught. This component of the program should include cutaneous soft

tissue augmentation with injectable filler material, small-volume tumescent liposuction and fat transplantation, hair replacement surgery, skin resurfacing techniques, and cosmetic laser procedures (e.g., methods of scar revision or elimination of congenital skin defects).

V.B.2.c).(3)

The program must provide training in Mohs micrographic surgery, as employed in the management of complicated cancers of the skin. This technique has special importance since it requires both surgical skill and expertise in dermatopathology and in the laboratory methods utilized for the preparation of tissue specimens. Fellow experience in Mohs surgery must include treatment of aggressive tumors, large tumors, tumors arising in difficult anatomic sites (ear, eyelid, nose, lips), tumors requiring complex histopathologic interpretation, basal cell or squamous cell carcinoma that has spread from skin to contiguous tissues, tumors requiring multiple stages of excision, recurrent tumors, tumors for which management requires the involvement of colleagues from other specialties, and tumors in patients with complex medical problems requiring special intraoperative management.

V.B.2.c).(4)

The reconstruction of defects following Mohs micrographic surgery or other excisions should be given special attention. The fellows must become competent in cutaneous reconstructive surgery including random pattern axial flap repair, grafting techniques, and staged reconstructive techniques. However, some cases will be quite complex and fellows should learn when the assistance of (or referral to) colleagues from other specialties will be necessary.

V.B.2.d)

Laboratory Management

The program must provide the fellow with the experience required to set up and operate a frozen section laboratory capable of processing sections for Mohs micrographic surgery and to supervise and train laboratory personnel.

V.B.2.e)

Quality Assurance Activities and Documentation

V.B.2.e).(1)

There should be an ongoing quality assurance program.

V.B.2.e).(2)

Documentation of cases and complications in a case log for departmental files and the personal files of all fellows is required. There should be regularly scheduled conferences to consider complications and outcomes and utilization review.

V.B.2.e).(3) There should be documentation of the fellows' surgical experience. This should include a case log with operative reports and pre- and postoperative photographs in appropriate cases. The surgical director should review and confirm the operative experience records of all fellows.

V.C. Fellows Scholarly Activities

Each program must provide an opportunity for fellows to participate in research or other scholarly activities, and fellows must participate actively in such scholarly activities.

VI. Fellow Duty Hours and the Working Environment

Providing fellows with a sound didactic and clinical education must be carefully planned and balanced with concerns for patient safety and fellow well-being. Each program must ensure that the learning objectives of the program are not compromised by excessive reliance on fellows to fulfill service obligations. Didactic and clinical education must have priority in the allotment of fellows' time and energy. Duty hour assignments must recognize that faculty and fellows collectively have responsibility for the safety and welfare of patients.

VI.A. Supervision of Fellows

VI.A.1. All patient care must be supervised by qualified faculty. The program director must ensure, direct, and document adequate supervision of fellows at all times. Fellows must be provided with rapid, reliable systems for communicating with supervising faculty.

VI.A.2. Faculty schedules must be structured to provide fellows with continuous supervision and consultation.

VI.A.3. Faculty and fellows must be educated to recognize the signs of fatigue, and adopt and apply policies to prevent and counteract its potential negative effects.

VI.B. Duty Hours

VI.B.1. Duty hours are defined as all clinical and academic activities related to the program; i.e., patient care (both inpatient and outpatient), administrative duties relative to patient care, the provision for transfer of patient care, time spent in-house during call activities, and scheduled activities such as conferences. Duty hours do not include reading and preparation time spent away from the duty site.

VI.B.2. Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities.

VI.B.3. Fellows must be provided with 1 day in 7 free from all educational and clinical responsibilities, averaged over a 4-week period,

inclusive of call. One day is defined as 1 continuous 24-hour period free from all clinical, educational, and administrative duties.

VI.B.4. Adequate time for rest and personal activities must be provided. This should consist of a 10-hour time period provided between all daily duty periods and after in-house call.

VI.C. On-call Activities

The objective of on-call activities is to provide fellows with continuity of patient care experiences throughout a 24-hour period. *In-house call* is defined as those duty hours beyond the normal work day, when fellows are required to be immediately available in the assigned institution.

VI.C.1. In-house call must occur no more frequently than every third night, averaged over a 4-week period.

VI.C.2. Continuous on-site duty, including in-house call, must not exceed 24 consecutive hours. Fellows may remain on duty for up to 6 additional hours to participate in didactic activities, transfer care of patients, conduct outpatient clinics, and maintain continuity of medical and surgical care.

VI.C.3. No new patients may be accepted after 24 hours of continuous duty.

VI.C.4. At-home call (or pager call) is defined as a call taken from outside the assigned institution.

VI.C.4.a) The frequency of at-home call is not subject to the every-third-night limitation. At-home call, however, must not be so frequent as to preclude rest and reasonable personal time for each fellow. Fellows taking at-home call must be provided with 1 day in 7 completely free from all educational and clinical responsibilities, averaged over a 4-week period.

VI.C.4.b) When fellows are called into the hospital from home, the hours fellows spend in-house are counted toward the 80-hour limit.

VI.C.4.c) The program director and the faculty must monitor the demands of at-home call in their programs, and make scheduling adjustments as necessary to mitigate excessive service demands and/or fatigue.

VI.D. Moonlighting

VI.D.1. Because graduate medical education is a full-time endeavor, the program director must ensure that moonlighting does not interfere with the ability of the fellow to achieve the goals and objectives of the educational program.

VI.D.2. The program director must comply with the sponsoring institution's written policies and procedures regarding moonlighting, in compliance with the ACGME Institutional Requirements.

VI.D.3. Any hours a fellow works for compensation at the sponsoring institution or any of the sponsor's primary clinical sites must be considered part of the 80-hour weekly limit on duty hours. This refers to the practice of internal moonlighting.

VI.E. Oversight

VI.E.1. Each program must have written policies and procedures consistent with the Institutional and Program Requirements for fellow duty hours and the working environment. These policies must be distributed to the fellows and the faculty. Duty hours must be monitored with a frequency sufficient to ensure an appropriate balance between education and service.

VI.E.2. Back-up support systems must be provided when patient care responsibilities are unusually difficult or prolonged, or if unexpected circumstances create fellow fatigue sufficient to jeopardize patient care.

VI.F. Duty Hours Exceptions

An RRC may grant exceptions for up to 10% of the 80-hour limit to individual programs based on a sound educational rationale. Prior permission of the institution's GMEC, however, is required.

VII. Evaluation

VII.A. Fellow

VII.A.1. Formative Evaluation

The faculty must evaluate in a timely manner the fellows whom they supervise. In addition, the program must demonstrate that it has an effective mechanism for assessing fellow performance throughout the program, and for utilizing the results to improve fellow performance.

VII.A.1.a) Assessment should include the use of methods that produce an accurate assessment of fellows' competence in patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice.

VII.A.1.b) Assessment should include the regular and timely performance feedback to fellows that includes at least

semiannual written evaluations. Such evaluations are to be communicated to each fellow in a timely manner, and maintained in a record that is accessible to each fellow.

VII.A.1.c) Assessment should include the use of assessment results, including evaluation by faculty, patients, peers, self, and other professional staff, to achieve progressive improvements in fellows' competence and performance.

VII.A.2. Final Evaluation

The program director must provide a final evaluation for each fellow who completes the program. This evaluation must include a review of the fellow's performance during the final period of education, and should verify that the fellow has demonstrated sufficient professional ability to practice competently and independently. The final evaluation must be part of the fellow's permanent record maintained by the institution.

VII.B. Faculty

The performance of the faculty must be evaluated by the program no less frequently than at the midpoint of the accreditation cycle, and again prior to the next site visit. The evaluations should include a review of their teaching abilities, commitment to the educational program, clinical knowledge, and scholarly activities. This evaluation must include annual written confidential evaluations by fellows.

VII.C. Program

The educational effectiveness of a program must be evaluated at least annually in a systematic manner.

VII.C.1. Representative program personnel (i.e., at least the program director, representative faculty, and one fellow) must be organized to review program goals and objectives, and the effectiveness with which they are achieved. This group must conduct a formal documented meeting at least annually for this purpose. In the evaluation process, the group must take into consideration written comments from the faculty, the most recent report of the GMEC of the sponsoring institution, and the fellows' confidential written evaluations. If deficiencies are found, the group should prepare an explicit plan of action, which should be approved by the faculty and documented in the minutes of the meeting.

VII.C.2. The program should use fellow performance and outcome assessment in its evaluation of the educational effectiveness of the program. Performance of program graduates on the certification examination should be used as one measure of evaluating program effectiveness.

VII.C.3. The program should maintain a process for using assessment results together with other program evaluation results to improve the program.

VIII. Experimentation and Innovation

Since responsible innovation and experimentation are essential to improving professional education, experimental projects along sound educational principles are encouraged. Requests for experimentation or innovative projects that may deviate from the program requirements must be approved in advance by the RRC, and must include the educational rationale and method of evaluation. The sponsoring institution and program are jointly responsible for the quality of education offered to fellows for the duration of such a project.

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