ACGME International

Advanced Specialty Program Requirements for Graduate Medical Education in Endocrinology, Diabetes, and Metabolism (Internal Medicine)

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ACGME International Specialty Program Requirements for
Graduate Medical Education in Endocrinology, Diabetes, and Metabolism
(Internal Medicine)

Int. Introduction

Background and Intent: Programs must achieve and maintain Foundational Accreditation according to the ACGME-I Foundational Requirements prior to receiving Advanced Specialty Accreditation. The Advanced Specialty Requirements noted below complement the ACGME-I Foundational Requirements. For each section, the Advanced Specialty Requirements should be considered together with the Foundational Requirements.

Int. I. Definition and Scope of the Specialty

The medical specialty of endocrinology, diabetes, and metabolism focuses on the endocrine system, its diseases, and hormones; the integration of developmental events, such as proliferation, growth, and differentiation, including histogenesis and organogenesis; and the coordination of metabolism, respiration, excretion, movement, reproduction, and sensory perception, which depend on chemical cues and substances synthesized and secreted by specialized cells. Endocrinology, diabetes, and metabolism is the subspecialty of internal medicine that focuses on the diagnosis and care of disorders of the endocrine (glandular) system and associated metabolic dysfunction.

Int. II. Duration of Education

Int. II.A. The educational program in endocrinology, diabetes, and metabolism must be 24 or 36 months in length.

I. Institution

I.A. Sponsoring Institution

I.A.1. A fellowship in endocrinology, diabetes and metabolism must function as an integral part of ACGME-I-accredited residency in internal medicine.

I.B. Participating Sites

See International Foundational Requirements, Section I.B

II. Program Personnel and Resources

II.A. Program Director

See International Foundational Requirements, Section II.A.

II.B. Faculty

See International Foundational Requirements, Section II.B.

II.C. Other Program Personnel
II.C.1. There must be a close working relationship with dietary and/or nutrition services, as well as with specialists in general surgery, nephrology, neurological surgery, neurology, obstetrics and gynecology, ophthalmology, pediatrics, podiatry, and urology.

II.D. Resources

II.D.1. Laboratory and imaging services must be available, including:

II.D.1.a) a complete biochemistry laboratory and facilities for hormone immunoassays;

II.D.1.b) access to karyotyping and immunohistologic studies; and,

II.D.1.c) nuclear, ultrasound, and radiologic facilities, to include bone density.

III. Fellow Appointment

III.A. Eligibility Criteria

III.A.1. Prior to appointment in the program, fellows should have completed an ACGME-I-accredited residency program in internal medicine, or an internal medicine residency program acceptable to the Sponsoring Institution's Graduate Medical Education Committee.

IV. Specialty-Specific Educational Program

IV.A. ACGME-I Competencies

IV.A.1. The program must integrate the following ACGME-I Competencies into the curriculum.

IV.A.1.a) Professionalism

IV.A.1.a).(1) Fellows must demonstrate a commitment to professionalism and an adherence to ethical principles.

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

IV.A.1.b).(1) Fellows must provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Fellows must demonstrate competence in managing the care of patients:

IV.A.1.b).(1).(a) in a variety of health care settings, including inpatient and ambulatory settings; the practice of health promotion, disease prevention, diagnosis, care, and treatment programs of patients of each gender, from
adolescence to old age, during health and all stages of illness;

using critical thinking and evidence-based tools;

using population-based data; and,

with whom they have limited or no physical contact, through the use of telemedicine.

Fellows must demonstrate competence in the evaluation and management of hormonal problems, including diseases, infections, neoplasms, and other causes of dysfunction of the following endocrine organs:

- adrenal cortex and medulla;
- hypothalamus and pituitary;
- ovaries and testes;
- pancreatic islets;
- parathyroid; and,
- thyroid.

Fellows must demonstrate competence in the care of patients with Type 1 and Type 2 diabetes, as well as other types of diabetes, including:

- atypical diabetes;
- cystic fibrosis-related diabetes;
- diabetes detection and management during pregnancy;
- evaluation and management of acute, life-threatening complications of hyper- and hypoglycemia;
- evaluation and management of intensive insulin therapy in critical care and surgical patients;
- intensive management of glycemic control in the ambulatory setting;
- latent autoimmune diabetes in adults;
- long-term goals, counseling, education, and monitoring;
- monogenic diabetes;
multidisciplinary diabetes education and treatment programs;
prevention and surveillance of microvascular and macrovascular complications; and,
transplant-related diabetes.
Fellows must demonstrate competence in the care of patients with:
calcium, phosphorus, and magnesium imbalances;
disorders of bone and mineral metabolism, with particular emphasis on the diagnosis and management of osteoporosis;
disorders of fluid, electrolyte, and acid-base metabolism;
gonadal disorders; and,
nutritional disorders of obesity, anorexia nervosa, and bulimia.
Fellows must be able to perform all medical, diagnostic, and surgical procedures considered essential to the subspecialty, including:
performing diagnostic and therapeutic procedures relevant to their individual specific planned career path, to include:
continuous glucose monitoring;
management of insulin pumps; and,
thyroid biopsy.
treating their patient’s conditions with practices that are patient-centered, safe, scientifically based, effective, timely, and cost-effective, to include gender dysphoria or hormonal treatments for transgender patients:
using diagnostic and/or imaging studies relevant to the care of the patient, to including:
computed tomography (CT);
diagnosis and management of ectopic hormone production;
IV.A.1.b). (5). (c). (iii) diagnosis and management of lipid and lipoprotein disorders;

IV.A.1.b). (5). (c). (iv) genetic screening and counseling for endocrine and metabolic disorders;

IV.A.1.b). (5). (c). (v) interpretation of hormone assays;

IV.A.1.b). (5). (c). (vi) interpretation of laboratory studies, including the effects of non-endocrine disorders on these studies;

IV.A.1.b). (5). (c). (vii) interpretation of skeletal dual photon absorptiometry;

IV.A.1.b). (5). (c). (viii) performance and interpretation of stimulation and suppression tests;

IV.A.1.b). (5). (c). (ix) magnetic resonance imaging (MRI);

IV.A.1.b). (5). (c). (x) quantification of bone density;

IV.A.1.b). (5). (c). (xi) radionuclide localization of endocrine tissue;

IV.A.1.b). (5). (c). (xii) thyroid fine needle biopsy; and,

IV.A.1.b). (5). (c). (xiii) ultrasonography of the soft tissues of the neck.

IV.A.1.c) Medical Knowledge

IV.A.1.c). (1) 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. Fellows must demonstrate knowledge of:

IV.A.1.c). (1). (a) the scientific method of problem solving, and evidence-based decision-making;

IV.A.1.c). (1). (b) indications, contraindications, and techniques for, and limitations, complications, and interpretation of results of those diagnostic and therapeutic procedures integral to the discipline, including the appropriate indications for and use of screening tests and procedures;

IV.A.1.c). (1). (c) basic laboratory techniques, including quality control, quality assurance, and proficiency standards;

IV.A.1.c). (1). (d) biochemistry and physiology, including cell and molecular biology, as they relate to endocrinology,
IV.A.1.c).(1).(e) developmental endocrinology, including growth and
diabetes, and metabolism;
diabetes, endocrinology, diabetes, growth and development,
endocrinology, diabetes, growth and development,
sexual differentiation, and pubertal maturation;
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endocrinology, diabetes, growth and development,
care, including the social determinates of health, as well as
the ability to call effectively on other resources in the system
to produce optimal care.

IV.B. Regularly Scheduled Educational Activities

IV.B.1. The educational program must include didactic instruction based upon the
core knowledge content in endocrinology, diabetes, and metabolism.

IV.B.1.a) Fellows must have a sufficient number of didactic sessions to
ensure fellow-fellow and fellow-and-faculty member interaction.

IV.B.2. The program must ensure that fellows have an opportunity to review all
knowledge content from conferences that they could not attend.

IV.B.3. Fellows must receive instruction in practice management relevant to
endocrinology, diabetes, and metabolism.

IV.C. Clinical Experiences

IV.C.1. 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.

IV.C.2. Rotations must be structured to allow fellows to function as a part of an
effective interprofessional team that works together toward the shared goals
of patient safety and quality improvement.

IV.C.3. Rotations must be structured to minimize conflicting inpatient and outpatient
responsibilities.

IV.C.4. At least 12 months must be devoted to clinical experiences.

IV.C.5. Fellows must have experience in the role of an endocrinology, diabetes and
metabolism consultant in both the inpatient and ambulatory settings.

IV.C.6. The program must provide educational experiences that allow fellows to
interact with and learn from other health care professionals.

IV.C.7. The educational program must provide fellows with elective experiences
relevant to their future practice or to further skill/competence development.

IV.C.8. Fellows must participate in training using simulation.

IV.C.9. Fellows should have a structured continuity ambulatory clinic experience for
the duration of the program that exposes them to the breadth and depth of
endocrinology, diabetes, and metabolism.

IV.C.9.a) This should include an appropriate distribution of patients of each
gender and a diversity of ages.
This experience should average two half-days each week throughout the educational program.

Each fellow should, on average, be responsible for four to eight patients during each half-day session.

Each fellow should, on average, be responsible for no more than eight to 12 patients during each half-day ambulatory session.

The continuing patient care experience should not be interrupted by more than one month, excluding a fellow's vacation.

While in the program, each fellow must complete at least one of the following scholarly activities: participation in grand rounds; poster presentations; 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 service as a journal reviewer, journal editorial board member, or editor.

See International Foundational Requirements, Section IV.D.2.

See International Foundational Requirements, Section V.

See International Foundational Requirements, Section VI.A.

See International Foundational Requirements, Section VI.B.

See International Foundational Requirements, Section VI.C.

Direct supervision of procedures performed by each fellow must occur until competence has been acquired and documented by the program director.
VI.E. Professionalism
See International Foundational Requirements, Section VI.E.

VI.F. Well-Being
See International Foundational Requirements, Section VI.F.

VI.G. Fatigue
See International Foundational Requirements, Section VI.G.

VI.H. Transitions of Care
See International Foundational Requirements, Section VI.H.

VI.I. Clinical Experience and Education
See International Foundational Requirements, Section VI.I.

VI.J. On-Call Activities
See International Foundational Requirements, Section VI.J.