ACGME Program Requirements for Graduate Medical Education in Pediatric Cardiology (Subspecialty of Pediatrics)

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Proposed ACGME Program Requirements for Graduate Medical Education
in Pediatric Cardiology

Common Program Requirements (Fellowship) are in BOLD

Where applicable, text in italics describes the underlying philosophy of the requirements in that section. These philosophic statements are not program requirements and are therefore not citable.

Note: Changes tracked in red represent changes made to harmonize the specialty-specific Program Requirements with the revised Common Program Requirements. Changes tracked in black represent the proposed major revision to the specialty-specific Program Requirements. Only the changes in black are subject to review and comment.

Background and Intent: These fellowship requirements reflect the fact that these learners have already completed the first phase of graduate medical education. Thus, the Common Program Requirements (Fellowship) are intended to explain the differences.

Introduction

Int.A. 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 into 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 Subspecialty

Scope of Educational Experience

Pediatric cardiology programs provide fellows with an understanding of normal and abnormal cardiovascular conditions, including congenital heart disease, with a focus on the pathophysiologic basis of cardiovascular disease, and prepare them to provide optimal care and consultation for pediatric patients with cardiovascular disease. (Core)* [Moved from Section VII Int.A.1.]

Int.C. Length of Educational Program

Duration of Educational Experience

Unless specified otherwise in the subspecialty-specific Program Requirements, the educational program must be 36 months in length. (Core) [Moved from Int.B.]

I. Oversight

I.A. Sponsoring Institution

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

When the Sponsoring Institution is not a rotation site for the program, the most commonly utilized site of clinical activity for the program is the primary clinical site.

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 including, but not limited to a university, a medical school, a teaching hospital, a nursing home, a school of public health, a health department, a public health agency, an organized health care delivery system, a medical examiner’s office, an educational consortium, a teaching health center, a physician group practice, federally qualified health center, or an educational foundation.

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

I.A.1.a) The presence of a subspecialty program must not adversely affect the education of pediatric residents. (Core) [Moved from I.A.1.a]

I.B. Participating Sites
A participating site is an organization providing 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) An accredited pediatric subspecialty cardiology program must exist in conjunction with and be an integral part of a core pediatric residency program, and must be sponsored by the same ACGME-accredited Sponsoring Institution. (Core) [Moved from I.A.1.]

I.B.1.a).(1) The subspecialty pediatric cardiology program should be geographically proximate to the core pediatric residency program. (Detail) [Moved from I.A.1.b)

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 10 years; and, (Core)

I.B.2.a).(2) be approved by the designated institutional official (DIO). (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 for that site, in collaboration with the program director. (Core)

Background and Intent: While all fellowship programs must be sponsored by a single ACGME-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 designate a faculty member responsible for ensuring the quality of the educational experience. In some circumstances, the person charged with this responsibility may not be physically present at the site, but remains responsible for fellow education occurring at the site. The requirements under I.B.3. are intended to ensure that this will be the case.

Suggested elements to be considered in PLAs will be found in the ACGME Program Director’s Guide to the Common Program Requirements. These include:
• Identifying the faculty members who will assume educational and supervisory responsibility for fellows
• Specifying the responsibilities for teaching, supervision, and formal evaluation of fellows
• Specifying the duration and content of the educational experience
• Stating the policies and procedures that will govern fellow education during the assignment

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 the ACGME's Accreditation Data System (ADS). (Core)

I.B.5. Any site providing six months or more of required rotations should be approved by the Review Committee. (Detail) [Moved from I.B.3.]

I.C. The program, in partnership with its Sponsoring Institution, must engage in practices that focus on mission-driven, ongoing, systematic recruitment and retention of a diverse and inclusive workforce of residents (if present), fellows, faculty members, senior administrative staff members, and other relevant members of its academic community. (Core)

Background and Intent: It is expected that the Sponsoring Institution has, and programs implement, policies and procedures related to recruitment and retention of minorities underrepresented in medicine and medical leadership in accordance with the Sponsoring Institution's mission and aims. The program's annual evaluation must include an assessment of the program's efforts to recruit and retain a diverse workforce, as noted in V.C.1.c).(5).(c).

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) Adequate inpatient and outpatient facilities, as specified in the requirements for each subspecialty, must be available. (Core) [Moved from II.D.1.]

I.D.1.a).(1) These must be of sufficient size and be appropriately staffed and equipped to meet the educational needs of the program. (Core) [Moved from II.D.1.a]

I.D.1.a).(2) There must be an intensive care unit in which patients with congenital heart disease are cared for by a multidisciplinary team that includes faculty members from pediatric critical care medicine and pediatric cardiology under the supervision of the training program staff. (Detail) [Moved from VIII.C.3.]
I.D.1.a). (2). (a) In these units, there must be preoperative and postoperative patients with congenital heart disease who require pre-operative and post-operative care available to the fellows as well as appropriate personnel and equipment to allow provision of the special and constant care needed by these patients. (Core [Moved from VIII.C.3.a])

I.D.1.b) Facilities and services, including comprehensive laboratory, pathology, and imaging, must be available. (Core)

I.D.1.c) The following support facilities must be available: (Core) [Moved from VIII.C.5.]

I.D.1.c). (1) diagnostic imaging facilities, including advanced cardiac imaging; (Core) [Moved from VIII.C.5.a]]

I.D.1.c). (1). (a) including cardiac MRI and/or CT scanning and nuclear cardiology; (Core) [Moved from VIII.C.5.a).(1)]

I.D.1.c). (2) diagnostic and interventional cardiac catheterization laboratory facilities; (Core) [Moved from VIII.C.5.b]]

I.D.1.c). (3) an echocardiography laboratory (Core) [Moved from VIII.C.5.c)] with facilities for performing and interpreting standard transthoracic 2-D and Doppler echocardiograms, fetal echocardiograms, and transesophageal echocardiograms; (Core) [Moved from VIII.C.5.c).(1)]

I.D.1.c). (4) a non-invasive electrophysiology laboratory (Core) [Moved from VIII.C.5.d)] with facilities for performing and interpreting standard electrocardiograms, ambulatory electrocardiograms, and exercise electrocardiograms, and ambulatory electrocardiographic monitoring; and (Core) [Moved from VIII.C.5.d).(1)]

I.D.1.c). (5) a clinical cardiac electrophysiologic laboratory for invasive intracardiac electrophysiologic studies and catheter ablation; (Core) [Moved from VIII.C.5.e]]

I.D.1.d) An adequate numbers and variety of pediatric cardiology of pediatric subspecialty patients ranging in age from newborn through young adulthood must be available to provide a broad experience for the fellows. (Core) [Moved from II.D.4.]

I.D.1.e) The program must maintain an appropriate balance of the number and variety of patients, the number of faculty members, and the number of fellows in the program. (Core) [Moved from II.D.4.a]]
I.D.1.e).(1) A sufficient number of patients must be available in inpatient and outpatient settings to meet the educational needs of the program. (Core)

I.D.1.f) Clinical data, including data such as age, diagnosis, morbidity, and mortality from inpatients, outpatients, and patients undergoing cardiac catheterization and/or surgery should be available in a single database to allow immediate access cross-indexed to allow rapid evaluation and analysis of the assembled information, including age, diagnosis, and outcome morbidity and mortality. (Detail) [Moved from VIII.C.4.]

I.D.1.g) Support services must include clinical laboratories, intensive care, nutrition, occupational and physical therapy, pathology, pharmacology, mental health, diagnostic imaging, respiratory therapy, and social services. (Core) [Moved from II.D.2.]

I.D.1.h) Patients must range in age from newborn through young adulthood, as appropriate. (Core) [Moved from II.D.3.]

I.D.1.i) Facilities should include space in an ambulatory setting for optimal evaluation and care of outpatients, and an inpatient area with a full array of pediatric and related services staffed by pediatric faculty and fellows. (Core) [Moved from VIII.C.1.]

I.D.1.j) An active inpatient pediatric cardiology service is essential to the educational program. (Detail) [Moved from VIII.C.2.]

I.D.1.j).(1) It should provide all the diagnostic and treatment services characteristic of a comprehensive children's facility. (Detail) [Moved from VIII.C.2.a)]

I.D.1.k) Laboratories to perform routine analyses of blood and urine. (Core) [Moved from VIII.C.5.f)]

I.D.1.k).(1) to determine blood gas values, to perform blood chemistry and coagulation profiles, and to type and cross-match blood; (Detail) [Moved from VIII.C.5.f).(1)]

I.D.1.l) an operating room designed for pediatric patients who require cardiopulmonary extracorporeal circulation. (Core) [Moved from VIII.C.5.g)]

I.D.1.l).(1) The area must be equipped with appropriate monitoring devices, defibrillators, and cardiac pacing devices; and, (Detail) [Moved from VIII.C.5.g).(1)]

I.D.1.m) a blood bank. (Core) [Moved from VIII.C.5.h)]
This should be closely affiliated with the center that is equipped to meet the demands of cardiac surgery. [Moved from VIII.C.5.h).(1)]

Patients available to the program must encompass age groups from the fetus and newborn through young adulthood, and must include exposure to adults with heart disease, particularly congenital heart disease. [Moved from VIII.C.6.a)]

The fellow must be exposed to pathologic conditions ranging from mild to those requiring extensive or continued intensive care. [Moved from VIII.C.6.a).(1)]

There must be both pre- and post-surgical and medical experience with a broad spectrum of congenital and acquired heart disease, and in chronic, acute, and emergency situations. [Moved from VIII.C.6.a).(2)]

Patients admitted to the inpatient service should be under the direct or indirect supervision of the subspecialty program staff, and must be available to the fellows. [Moved from VIII.C.6.b)]

An accredited program must have an annual patient population, including patients less than one year of age that is sufficient in number to enable each fellow to become skilled in techniques fundamental to the practice of pediatric cardiology. [Moved from VIII.C.6.c)]

It is preferable that all facilities be within the primary site. Where a special facility is shared in the interest of cost and efficiency, the program director may arrange for a fellow to rotate to that facility. [Moved from VII.]

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]

- access to food while on duty; [Core]
- safe, quiet, clean, and private sleep/rest facilities available and accessible for fellows with proximity appropriate for safe patient care; [Core]
their peak abilities, which requires the work environment to provide them with the ability to meet their basic needs within proximity of 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 overnight call is not required, to accommodate the fatigued fellow.

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, as outlined in VI.C.1.d).(1).

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 enriches 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 Graduate Medical Education Committee (GMEC) must approve a change in program director. (Core)

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

Background and Intent: While the ACGME 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 ACGME. The program director’s nomination is reviewed and approved by the GMEC. Final approval of program directors resides with the Review Committee.

II.A.2. The program director must be provided with support adequate for administration of the program based upon its size and configuration. (Core)

II.A.2.a) Program leadership, including the program director and associate program director(s), must be provided with a minimum combined total of 20-35 percent full time equivalent (FTE) protected time for the administration of the program (not including scholarly activity), depending on the size of the program, as follows: (Core) [Moved from I.A.2.]

<table>
<thead>
<tr>
<th>Program Size</th>
<th>% FTE Required</th>
</tr>
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<tbody>
<tr>
<td>0-3 fellows</td>
<td>20%</td>
</tr>
<tr>
<td>4-6 fellows</td>
<td>25%</td>
</tr>
<tr>
<td>7-9 fellows</td>
<td>30%</td>
</tr>
<tr>
<td>≥ 10 fellows</td>
<td>35%</td>
</tr>
</tbody>
</table>

Specialty Background and Intent: The minimum total of 20-35 percent protected time for the administration of the program is the combined time required for the program director, and associate program director(s); it does not include time devoted to the program by the fellowship coordinator or other support personnel. Individual members of program leadership are not required to have 20-35 percent protected time each. Time provided by research grant funding does not count toward the minimum required protected time for the administration of the program.

II.A.3. Qualifications of the program director:
II.A.3.a) must include subspecialty expertise and qualifications acceptable to the Review Committee; and, (Core)

II.A.3.b) must include current certification in the subspecialty for which they are the program director by the American Board of Pediatrics or by the American Osteopathic Board of Pediatrics, or subspecialty qualifications that are acceptable to the Review Committee. (Core)

II.A.3.b).(1) Qualifications other than subspecialty certification by the American Board of Pediatrics (ABP) will be considered only in exceptional circumstances. (Detail)

**Specialty Background and Intent:** Qualifications other than pediatric cardiology certification by the American Board of Pediatrics (ABP) or American Osteopathic Board of Pediatrics (AOBP) will be considered only in exceptional circumstances. For a program director without pediatric cardiology certification from the ABP or AOBP, the Review Committee will consider the following criteria in determining whether alternate qualifications are acceptable:

- completion of a pediatric cardiology fellowship program
- scholarship within the field of pediatric cardiology; specifically, evidence of on-going scholarship documented by contributions to the peer-reviewed literature in pediatric cardiology, and pediatric cardiology presentations at national meetings
- leadership and/or participation on committees in national pediatric subspecialty organizations
- current clinical activity in pediatric cardiology

Alternate qualifications will not be accepted for individuals who have completed ACGME-accredited or AOA-approved fellowship education within the United States and have failed the ABP or AOBP certification exam, or have chosen not to take the ABP or AOBP certification exam.

Years of practice are not an equivalent to specialty board certification, and the Review Committee does not accept the phrase "board eligible."

II.A.3.c) must include a record of ongoing involvement in scholarly activities, including peer-reviewed publications and mentoring (i.e., guiding fellows in the acquisition of competence in the clinical, teaching, research, quality improvement, and advocacy skills pertinent to the discipline). (Core)

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 exemplar. It is of utmost importance, therefore, that the program director model outstanding professionalism, high quality patient care, educational excellence, and a scholarly approach to work. The program director creates an environment where respectful discussion is welcome, with the goal of continued improvement of the educational experience.

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

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 ultimate 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 ACGME 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, as outlined in V.B.; (Core)

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

II.A.4.a).(6) have the authority to remove program faculty members from participation in the fellowship program education at all sites; (Core)

II.A.4.a).(7) 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 the 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 residents.

| II.A.4.a).(8) | submit accurate and complete information required and requested by the DIO, GMEC, and ACGME; *(Core)* |
| II.A.4.a).(9) | 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).(10) | 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).(11) | ensure the program’s compliance with the Sponsoring Institution’s policies and procedures related to grievances and due process; *(Core)* |
| II.A.4.a).(12) | 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)* |
| II.A.4.a).(13) | ensure the program’s compliance with the Sponsoring Institution’s policies and procedures on employment and non-discrimination; *(Core)* |
| II.A.4.a).(13).(a) | Fellows must not be required to sign a non-competition guarantee or restrictive covenant. *(Core)* |
| II.A.4.a).(14) | document verification of program completion for all graduating fellows 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) provide verification of an individual fellow’s completion upon the fellow’s request, within 30 days; and, (Core)

II.A.4.a).(16) obtain review and approval of the Sponsoring Institution’s DIO before submitting information or requests to the ACGME, as required in the Institutional Requirements and outlined in the ACGME Program Director’s Guide to the Common Program Requirements. (Core)

II.A.4.a).(17) ensure that the fellows are mentored in their development of clinical, educational, and administrative skills; (Core) [Moved from II.A.4.p]

II.A.4.a).(18) ensure that each fellow’s experience in such procedures be documented and that such documentation is available for review; (Core) [Moved from II.A.4.q]

II.A.4.a).(19) coordinate, with the core and subspecialty program directors, the incorporation of the competencies into fellowship education in order to foster consistent expectations with regard to fellows’ achievement of them, and for faculty members with regard to evaluation processes; and, (Core) [Moved from II.A.4.r]

II.A.4.a).(20) maintain documentation of meetings that describe ongoing interaction among pediatric subspecialty and core program directors. (Core) [Moved from II.A.4.s]

II.A.4.a).(21) These meetings should take place at least semi-annually. (Detail) [Moved from II.A.4.s).(1)]

II.A.4.a).(22) These meetings should address a departmental approach to common educational issues and concerns (e.g., core curriculum, competencies, evaluation). (Detail) [Moved from II.A.4.s).(2)]

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, through the graduate medical education system, 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. For 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.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)

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; and, (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.2.h) This must include the mentoring of fellows in the application of as they apply scientific principles, epidemiology, biostatistics, and evidence-based medicine to the clinical care of patients. (Core) [Moved from II.B.5.d]

II.B.2.i) To provide an appropriate environment for the fellows, the fellowship faculty must have a program of ongoing scholarship. (Core) [Moved from II.B.5.f]

II.B.2.i).(1) This must be characterized by peer-reviewed funding and/or publications. (Core) [Moved from II.B.5.f).(1)]

II.B.2.i).(2) The members of the teaching faculty must play a substantial role in conceiving and writing the funding application(s), conducting the project, collecting and analyzing data, and publishing results. (Core) [Moved from II.B.5.f).(2)]

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) Subspecialty physician faculty members must:

II.B.3.b).(1) have current certification in the subspecialty by the American Board of Pediatrics or the American Osteopathic Board of Pediatrics, or possess qualifications judged acceptable to the Review Committee. (Core)

II.B.3.b).(2) Acceptable qualifications for the required key subspecialty faculty include: (Core) [Moved from II.B.2.a)]

II.B.3.b).(2).(a) certification, if eligible, by the appropriate member board of the American Board of Medical Specialties (ABMS); or, (Core) [Moved from II.B.2.a).(1)]

II.B.3.b).(2).(b) if ineligible for certification, documented subspecialty training and peer-reviewed publications in the field, with evidence of active
Specialty Background and Intent: For a faculty member without pediatric cardiology certification from the ABP or AOBP, the Review Committee will consider the following criteria in determining whether alternate qualifications are acceptable:

- completion of a pediatric cardiology fellowship program
- scholarship within the field of pediatric cardiology; specifically, evidence of on-going scholarship documented by contributions to the peer-reviewed literature in pediatric cardiology, and pediatric cardiology presentations at national meetings
- leadership and/or participation on committees in pediatric subspecialty organizations
- current clinical activity in pediatric cardiology

Alternate qualifications will not be accepted for individuals who have completed ACGME-accredited or AOA-approved fellowship education within the United States and have failed the ABP or AOBP certification exam, or have chosen not to take the ABP or AOBP certification exam.

If a faculty member is a recent graduate of a pediatric cardiology program, the Review Committee expects that individual to take and pass the next available ABP or AOBP pediatric cardiology certifying examination.

Years of practice are not an equivalent to specialty board certification, and, the Review Committee does not accept the phrase “board eligible.”

Provision of documentation of alternate qualifications is the responsibility of the program director.

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 subspecialty or in research methodology. If the program director determines that the contribution of a non-physician individual is significant to the education of the fellow, the program director may designate the individual as a program faculty member or a program core faculty member.

II.B.3.d) Any other specialty physician faculty members must have current certification in their specialty by the appropriate American Board of Medical Specialties (ABMS) member board or American Osteopathic Association (AOA) certifying board, or possess qualifications judged acceptable to the Review Committee. (Core)
In addition to the pediatric cardiology faculty members, ABP- or AOBP-certified faculty members and consultants in the following subspecialties must be available:

- neonatal-perinatal medicine; (Core)
- pediatric critical care medicine; (Core)
- pediatric gastroenterology; (Core)
- pediatric hematology-oncology; (Core)
- pediatric infectious diseases; (Core)
- pediatric nephrology; and, (Core)
- pediatric pulmonology. (Core)

The faculty should also include the following specialists with substantial experience with pediatric problems:

- anesthesiologist(s); (Detail) [Moved from II.B.2.b).(1)]
- child and adolescent psychiatrist(s); (Detail) [Moved from II.B.2.b).(1)]
- child neurologist(s); (Detail) [Moved from II.B.2.b).(1)]
- congenital cardiothoracic surgeon(s); (Core)
- medical geneticist(s); (Core); (Detail) [Moved from II.B.2.b).(1)]
- pathologist(s); (Detail) [Moved from II.B.2.b).(1)]
- pediatric surgeon(s); and (Detail) [Moved from II.B.2.b).(1)]
- physiatrist(s); and, (Detail)
- radiologist(s); (Core); (Detail)

Faculty members with expertise in adult congenital cardiac disease should be available for transition care of young adults. (Detail)

Consultants should be available in obstetrics and gynecology and maternal-fetal medicine. (Detail)

Teaching and consultant faculty members in the full range of pediatric subspecialties and in other related disciplines
II.B.3.d). (6) The faculty should include an anesthesiologist(s), pathologist(s), and radiologist(s) who have substantial experience with pediatric problems and who interact with the fellows, as well as a medical geneticist(s), child neurologist(s), child and adolescent psychiatrist(s), pediatric surgeon(s), and surgical subspecialists, as appropriate to the subspecialty. [Moved from II.B.2.b]  

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.  

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 subspecialty. 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 ACGME Faculty Survey.  

II.B.4.a) Core faculty members must be designated by the program director.  

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

II.B.4.c) To ensure the quality of the educational and scholarly activity of the program, and to provide adequate supervision of fellows, there must be at least four core faculty members, inclusive of the program director, who are certified in pediatric cardiology by the ABP or AOBP, or who have other qualifications acceptable to the Review Committee pediatric cardiologists who provide sufficient time to the program to ensure its educational and research quality, and to provide adequate supervision of cardiology fellows.  

II.B.4.d) In addition to the subspecialty program director, there must be at least one other member of the faculty who is qualified in the subspecialty. (Specific details are included in the related subspecialty-specific section of the Requirements.)  

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

II.C.2. The program coordinator must be provided with support adequate for administration of the program based upon its size and configuration. (Core)

II.C.2.a) The Sponsoring Institution must provide support for a program coordinator(s) and other support personnel required for operation of the program. (Core) [Moved from I.A.3.]

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 ACGME. Individuals serving in this role are recognized as program coordinators by the ACGME.

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 ACGME 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)

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.

II.D.1. In order to enhance fellows’ understanding of the multidisciplinary nature of pediatric cardiology, the following personnel with pediatric focus and experience should be available:

II.D.1.a) child life therapist(s); and (Detail) [Moved from II.C.1.]

II.D.1.b) nutritionists—dietician(s); (Detail) [Moved from II.C.1.]

II.D.1.c) mental health professional(s); (Detail)

II.D.1.d) subspecialty nurse(s); (Detail) [Moved from II.C.1.]
II.D.1.e) pharmacist(s); (Detail) [Moved from II.C.1.]
II.D.1.f) physical and occupational therapist(s); (Detail) [Moved from II.C.1.]
II.D.1.g) respiratory therapist(s); (Detail) [Moved from II.C.1.]
II.D.1.h) school and special education liaison(s); (Detail)
II.D.1.i) social worker(s); and, (Detail) [Moved from II.C.1.]
II.D.1.j) speech and language therapist(s) (Detail) [Moved from II.C.1.]

II.D.2. Professional personnel should include nutritionists, social workers, respiratory therapists, pharmacists, subspecialty nurses, physical and occupational therapists, child life therapists, and speech therapists with pediatric focus and experience, as appropriate to the subspecialty. (Detail)

This requirement has been broken out as listed above.

III. Fellow Appointments

III.A. Eligibility Criteria

III.A.1. Eligibility Requirements – Fellowship Programs

All required clinical education for entry into ACGME-accredited fellowship programs must be completed in an ACGME-accredited residency program, an AOA-approved residency program, a program with ACGME International (ACGME-I) Advanced Specialty Accreditation, or a Royal College of Physicians and Surgeons of Canada (RCPSC)-accredited or College of Family Physicians of Canada (CFPC)-accredited residency program located in Canada. (Core)

Background and Intent: Eligibility for ABMS or AOA Board certification may not be satisfied by fellowship training. Applicants must be notified of this at the time of application, as required in II.A.4.a)(9).

III.A.1.a) Fellowship programs must receive verification of each entering fellow’s level of competence in the required field, upon matriculation, using ACGME, ACGME-I, or CanMEDS Milestones evaluations from the core residency program. (Core)

III.A.1.b) Prerequisite training education for entry into a pediatric cardiology subspecialty program must include the satisfactory completion of either an ACGME-accredited pediatrics or combined internal medicine-pediatrics residency program that satisfies the requirements listed in III.A.1. an RCPSC-accredited pediatrics or internal medicine-pediatrics combined residency program located in Canada. [Moved from III.A.2.]
III.A.1.c) Fellow Eligibility Exception

The Review Committee for Pediatrics will allow the following exception to the fellowship eligibility requirements:

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

- Evaluation by the program director and fellowship selection committee of the applicant’s suitability to enter the program, based on prior training and review of the summative evaluations of training in the core specialty; and,
- Review and approval of the applicant’s exceptional qualifications by the GMEC; and,
- Verification of Educational Commission for Foreign Medical Graduates (ECFMG) certification.

Applicants accepted through this exception must have an evaluation of their performance by the Clinical Competency Committee within 12 weeks of matriculation.

Background and Intent: An exceptionally qualified international graduate applicant has (1) completed a residency program in the core specialty outside the continental United States that was not accredited by the ACGME, AOA, ACGME-I, RCPSC or CFPC, and (2) demonstrated clinical excellence, in comparison to peers, throughout training. Additional evidence of exceptional qualifications is required, which may include one of the following: (a) participation in additional clinical or research training in the specialty or subspecialty; (b) demonstrated scholarship in the specialty or subspecialty; and/or (c) demonstrated leadership during or after residency. Applicants being considered for these positions must be informed of the fact that their training may not lead to certification by ABMS member boards or AOA certifying boards.

In recognition of the diversity of medical education and training around the world, this early evaluation of clinical competence required for these applicants ensures they can provide quality and safe patient care. Any gaps in competence should be addressed as per policies for fellows already established by the program in partnership with the Sponsoring Institution.

III.A.1.d) Applicants who do not meet the eligibility criteria in Program Requirement III.A.2. must be advised in writing by the program.
director to consult the ABP or other appropriate board regarding their eligibility for subspecialty certification. *(Core)* [Moved from III.A.2.d]]

III.B. The program director must not appoint more fellows than approved by the Review Committee. *(Core)*

III.B.1. All complement increases must be approved by the Review Committee. *(Core)*

III.C. Fellow 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 ACGME accreditation system is designed to encourage excellence and innovation in graduate 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.

In addition, the program 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. While programs must demonstrate substantial compliance with the Common and subspecialty-specific Program Requirements, it is recognized that within this framework, programs may place different emphasis on research, leadership, public health, etc. It is expected that the program aims will reflect the nuanced program-specific goals for it and its graduates; for example, it is expected that a program aiming to prepare physician-scientists will have a different curriculum from one focusing on community health.

IV.A. The 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.1.a) The program’s aims must be made available to program applicants, fellows, and faculty members. *(Core)*

IV.A.2. competency-based goals and objectives for each educational experience designed to promote progress on a trajectory to autonomous practice in their subspecialty. These must be distributed, reviewed, and available to fellows and faculty members; *(Core)*
IV.A.2.a) Each educational unit or major professional activity must have a curriculum associated with it. (Core) [Moved from IV.A.2.a]

IV.A.2.b) The competency-based goals and objectives, educational strategies, and assessment methods must align with intended outcomes of those activities. (Core) [Moved from IV.A.2.b]

IV.A.2.c) The curriculum should incorporate the competencies into the context of the major professional activities for which fellows should be entrusted. (Detail) [Moved from IV.A.2.c]

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

Background and Intent: These responsibilities may generally be described by PGY level and specifically by Milestones progress as determined by the Clinical Competency Committee. This approach encourages the transition to competency-based education. An advanced learner may be granted more responsibility independent of PGY level and a learner needing more time to accomplish a certain task may do so in a focused rather than global manner.

IV.A.4. structured educational activities beyond direct patient care; and, (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. Further specification can be found in IV.C.

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

IV.B. ACGME Competencies

Background and Intent: The Competencies provide a conceptual framework describing the required domains for a trusted physician to enter autonomous practice. These Competencies are core to the practice of all physicians, although the specifics are further defined by each subspecialty. The developmental trajectories in each of the Competencies are articulated through the Milestones for each subspecialty. The focus in fellowship is on subspecialty-specific patient care and medical knowledge, as well as refining the other competencies acquired in residency.

IV.B.1. The program must integrate the following ACGME 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) trustworthiness that makes colleagues feel secure when the fellow is responsible for the care of patients; (Outcome) [Moved from IV.A.5.e).(6)]

IV.B.1.a).(2) leadership skills that enhance team function, the learning environment, and/or the health care delivery system/environment with the ultimate intent of improving care of patients; and, (Outcome) [Moved from IV.A.5.e).(7)]

IV.B.1.a).(3) the capacity to recognize that ambiguity is part of clinical medicine and to respond by utilizing appropriate resources in dealing with uncertainty. (Outcome) [Moved from IV.A.5.e).(8)]

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

Background and Intent: Quality patient care is safe, effective, timely, efficient, patient-centered, equitable, and designed to improve population health, while reducing per capita costs. (See the Institute of Medicine [IOM]'s Crossing the Quality Chasm: A New Health System for the 21st Century, 2001 and Berwick D, Nolan T, Whittington J. The Triple Aim: care, cost, and quality. Health Affairs. 2008; 27(3):759-769.). In addition, there should be a focus on improving the clinician’s well-being as a means to improve patient care and reduce burnout among residents, fellows, and practicing physicians.

These organizing principles inform the Common Program Requirements across all Competency domains. Specific content is determined by the Review Committees with input from the appropriate professional societies, certifying boards, and the community.

IV.B.1.b).(1) Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. (Core)

IV.B.1.b).(1).(a) Fellows must develop competence in the necessary clinical skills used in the subspecialty and pediatric cardiology. (Outcome) [Moved from IV.A.5.a).(1).(a)]

IV.B.1.b).(1).(b) Fellows must demonstrate the ability to provide consultation, including the ability to perform a history and physical examination, make informed diagnostic and therapeutic decisions that result in optimal clinical judgement, and develop and carry out management plans. (Outcome) [Moved from IV.A.5.a).(1).(a)]

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IV.B.1.b).(1).(c) Fellows must demonstrate the ability to provide transfer of care that ensures seamless transitions. 

(Outcome Core) [Moved from IV.A.5.a).(1).(b)]

IV.B.1.b).(1).(d) Fellows must demonstrate the ability to counsel patients and families. 

(Core) [Moved from IV.A.5.a).(1).(a)]

IV.B.1.b).(1).(e) Fellows must demonstrate the ability to use information technology to optimize patient care.

(Core) [Moved from IV.A.5.a).(1).(a)]

IV.B.1.b).(1).(f) Fellows must demonstrate competence in providing or coordinating with a medical home for patients with complex and chronic diseases. 

(Core)

IV.B.1.b).(1).(g) Fellows must competently use demonstrate competence in performing and interpreting the results of laboratory tests and imaging diagnostic procedures for use in patient care.

(Outcome) [Moved from IV.A.5.a).(2).(a)]

IV.B.1.b).(1).(h) Fellows must be able to diagnose and manage a broad range of congenital and acquired cardiac problems, including:

- cyanotic congenital heart disease (CHD) in the newborn; 
  (Core)

- left to right shunt lesions; 
  (Core)

- outflow obstruction lesions; 
  (Core)

- acquired heart disease in children; and, 
  (Core)

- cardiac manifestation of genetic syndromes. 
  (Core)

IV.B.1.b).(1).(i) Fellows must be able to diagnose and manage patients with arrhythmias and conduction abnormalities. 

(Core)

IV.B.1.b).(1).(j) Fellows must be able to diagnose, manage, and refer children with advanced or end-stage heart failure and pulmonary hypertension for medical therapy, extracorporeal membrane oxygenation, ventricular assist devices, and/or cardiac transplantation. 

(Core)
IV.B.1.b).(1).(k) Fellows should demonstrate competence in the prevention, diagnosis, and management of patients with risk factors for hypertensive and atherosclerotic heart disease, including hyperlipidemic states. (Outcome) [Moved from IX.A.7.c]

IV.B.1.b).(1).(l) Fellows should be able to perform and interpret echocardiograms. (Detail)

IV.B.1.b).(1).(m) Fellows should be able to interpret transesophageal echocardiography (TEE), cardiac magnetic resonance imaging (MRI), and other relevant cardiac imaging. (Detail)

IV.B.1.b).(1).(n) must demonstrate the ability to develop and carry out management plans; and, (Outcome) [Moved from IV.A.5.a).(1).(e)]

IV.B.1.b).(2) Fellows must be able to perform all medical, diagnostic, and surgical procedures considered essential for the area of practice. (Core)

IV.B.1.b).(2).(a) Fellows must perform and interpret cardiac catheterization data and care for patients who require catheter-based interventions. (Core)

IV.B.1.b).(2).(b) Fellows must demonstrate competence in the techniques, indications, contraindications, complications, and interpretation of pericardiocentesis, cardiopulmonary resuscitation, mechanical ventilation, cardioversion, and temporary pacing. (Outcome Core) [Moved from IX.A.3.]

IV.B.1.b).(2).(b).(i) Fellows must acquire the necessary procedural skills and develop an understanding of their indications, risks, and limitations. (Outcome) [Moved from IV.A.5.a).(2).(a).(i)]

IV.B.1.b).(3) Training in history-taking and physical examination must be the cornerstone of the training program. (Core) [Moved from IX.A.1.]

IV.B.1.b).(3).(a) This must include family history that is a critical aspect of the evaluation of pediatric patients with suspected cardiovascular disease. (Detail) [Moved from IX.A.1.a]

IV.B.1.b).(4) Fellows must demonstrate the following fundamental skills: (Outcome) [Moved from IX.A.2.]
IV.B.1.b).(4).(a) Non-invasive Techniques (Outcome) [Moved from IX.A.2.a)]

IV.B.1.b).(4).(a).(i) Fellows must demonstrate competence in clinical diagnosis, with special emphasis on radiology, electrocardiography, echocardiography, exercise testing, ambulatory electrocardiography, and magnetic resonance imaging. (Outcome) [Moved from IX.A.2.a).(1)]

IV.B.1.b).(4).(a).(i).(a) Each fellow must perform and interpret a minimum of 300 pediatric echocardiography studies. (Detail) [Moved from IX.A.2.a).(1).(a)]

IV.B.1.b).(4).(a).(ii) Fellows must acquire skill in the interpretation of electrocardiograms, ambulatory ECG monitoring studies, and exercise stress testing with ECG monitoring. (Outcome) [Moved from IX.A.2.a).(2)]

IV.B.1.b).(4).(b) Invasive Techniques (Outcome) [Moved from IX.A.2.b)]

IV.B.1.b).(4).(b).(i) During the three years of training, each fellow should participate in a minimum of 100 catheterizations and 10 pediatric intracardiac electrophysiologic studies. (Detail) [Moved from IX.A.2.b).(1)]

IV.B.1.b).(5) Technical and Other Skills (Outcome) [Moved from IX.A.4.]

IV.B.1.b).(5).(a) Fellows must demonstrate competence in the use of relevant electronic equipment, recording devices, and other equipment necessary to perform cardiac catheterization, echocardiography, ambulatory ECG monitoring, and electrophysiologic studies. (Outcome) [Moved from IX.A.4.a)]

IV.B.1.b).(5).(b) The fellows should be exposed to the basics of implantable pacemaker and cardioverter defibrillator function, and the interrogation and
IV.B.1.b).(5).(c) In addition, fellows must have an understanding of the fundamentals of radiation safety. (Outcome) [Moved from IX.A.4.c]

IV.B.1.b).(6) Preoperative and Postoperative Care. (Outcome) [Moved from IX.A.5.]

IV.B.1.b).(6).(a) Fellows must demonstrate competence in the care of preoperative and postoperative care of patients having both closed and open cardiac surgery, in close cooperation with the cardiothoracic surgical staff. (Outcome) [Moved from IX.A.5.a]

IV.B.1.b).(7) Pediatric Cardiology Clinic. (Outcome) [Moved from IX.A.6.]

IV.B.1.b).(7).(a) Time and space in this clinic must be available for fellows to provide continuity and follow-up care for patients under their care. (Detail) [Moved from IX.A.6.a]

IV.B.1.b).(8) Other Clinical Experiences. (Outcome) [Moved from IX.A.7.]

IV.B.1.b).(8).(a) Fellows must demonstrate competence in the care of patients with collagen vascular diseases, infective endocarditis, cardiomyopathy, Kawasaki disease, and other infectious, vasculitic, and metabolic conditions. (Outcome) [Moved from IX.A.7.a]

IV.B.1.b).(8).(b) Instruction should include clinical experience in assessing the genetic basis of heart disease. (Detail) [Moved from IX.A.7.b]

IV.B.1.b).(8).(c) Fellows should understand the indications for cardiac transplantation and the basics of immunosuppression, natural history and complications of transplantation. (Outcome) [Moved from IX.A.7.d]

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. (Core)
IV.B.1.c).(1) Fellows must have a working understanding demonstrate knowledge of biostatistics, clinical and laboratory research methodology, study design, preparation of applications for funding and/or approval of clinical research protocols, critical literature review, principles of evidence-based medicine, ethical principles involving clinical research, and the achievement of proficiency in teaching methods. (Outcome) [Moved from IV.A.5.b).(1)]

IV.B.1.c).(2) Fellows must demonstrate knowledge of: (Outcome) [Moved from IX.B.1.]

IV.B.1.c).(2).(a) embryology and anatomy of the normal heart and vascular system, clinical morphologic correlations, and potential deviations from normal; (Outcome) [Moved from IX.B.1.a)]

IV.B.1.c).(2).(b) normal and abnormal cardiovascular and cardiopulmonary physiology and metabolism, as well as and fundamentals of cardiovascular pharmacology, including mechanisms of drug action, therapeutic indications, and side effects; and, (Outcome) [Moved from IX.B.1.b]]

IV.B.1.c).(2).(c) cardiovascular pathology that includes structured educational experiences to examine various types of congenital cardiovascular anomalies. (Outcome) [Moved from IX.B.1.c]]

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

Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning. (Core)

Background and Intent: Practice-based learning and improvement is one of the defining characteristics of being a physician. It is the ability to investigate and evaluate the care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning.

The intention of this Competency is to help a fellow refine the habits of mind required to continuously pursue quality improvement, well past the completion of fellowship.

IV.B.1.d).(1) self-evaluate performance and incorporate assessments provided by faculty members, peers, and patients. (Outcome) [Moved from IV.A.5.c).(9)]
IV.B.1.d).(1).(a) This should be a component of each fellow’s individual learning plan. (Moved from IV.A.5.c).(9).(a)

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.e).(1) teach proficiently based on knowledge of the principles of adult learning, including participating effectively in curriculum development, delivery of information, provision of feedback to learners, and assessment of educational outcomes. (Outcome) [Moved from IV.A.5.d).(6)]

IV.B.1.e).(1).(a) Graduates should be effective in teaching both individuals and groups of learners in clinical settings, classrooms, lectures, and seminars, as well as by electronic and print modalities. (Outcome) [Moved from IV.A.5.d).(6).(a)]

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) participate in the administrative aspects of the subspecialty, including. (Outcome) [Moved from IV.A.5.f).(7)]

IV.B.1.f).(1).(a) knowledge of regional and national access to care, resources, workforce, and financing appropriate to the subspecialty through guided reading and discussion; and, (Outcome) [Moved from IV.A.5.f).(7).(a)]

IV.B.1.f).(1).(b) organization and management of a subspecialty service within one’s own delivery system by engaging fellows as active participants in discussions (e.g., through scheduled division activities/meetings) that involve. (Outcome) [Moved from IV.A.5.f).(7).(b)]

IV.B.1.f).(1).(b).(i) staffing a service or unit, including managing personnel and making and adhering to a schedule; (Outcome) [Moved from IV.A.5.f).(7).(b).(i)]
IV.B.1.f).(1).(b).(i) drafting policies and procedures, leading interdisciplinary meetings and conferences, and providing in-service teaching sessions; (Outcome) [Moved from IV.A.5.f).(7).(b).(ii)]

IV.B.1.f).(1).(b).(ii) proposals for hospital and community resources, including clinical, laboratory, and research space, equipment, and technology necessary for the program to provide state-of-the-art care while advancing knowledge in the field; (Outcome) [Moved from IV.A.5.f).(7).(b).(iii)]

IV.B.1.f).(1).(b).(iii) business planning and practice management, including billing and coding, personnel management policies, and professional liability; (Outcome) [Moved from IV.A.5.f).(7).(b).(iv)]

IV.B.1.f).(1).(b).(iv) division or program development, organization, and maintenance; and, (Outcome) [Moved from IV.A.5.f).(7).(b).(v)]

IV.B.1.f).(1).(b).(v) collaboration within (e.g., with pathology, radiology, or surgery) and beyond (e.g., participation in national specialty societies, cooperative care groups, or multi-center research) the institution as appropriate to the subspecialty; (Outcome) [Moved from IV.A.5.f).(7).(b).(vi)]

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 longitudinally with shared goals of patient safety and quality improvement. (Core)
IV.C.2. The program must provide instruction and experience in pain management if applicable for the subspecialty, including recognition of the signs of addiction. (Core)

IV.C.3. Fellows must have at least 12 months of clinical experience. (Core)

IV.C.4. Fellows must have responsibility throughout their educational program for providing longitudinal outpatient care that is supervised by one or more members of the pediatric cardiology faculty. (Core)

IV.C.4.a) Fellows must have The program must include progressive, properly-balanced, and well-organized responsibility for the care and study of patients on inpatient services, in intensive care units, and in ambulatory centers. (CoreDetail) [Moved from Section VII Int.A.2.]

IV.C.4.b) Fellows must have sufficient experience exposure to and instruction in current surgical techniques, mechanical ventilation, methods of cardiopulmonary bypass, and therapeutic hypothermia to develop an adequate understanding of these surgical techniques. (CoreDetail) [Moved from IX.A.5.c]

IV.C.4.b).(1) Fellows should receive instruction in the management of immediate and delayed complications in postoperative patients following cardiac surgery and postoperative complications, both immediate and delayed. (Detail) [Moved from IX.A.5.d]

IV.C.4.c) Opportunity for Long-term follow-up observations of both pre-operative and post-operative patients must be provided. (CoreDetail) [Moved from IX.A.5.e]

IV.C.4.c).(1) Fellows should participate in consultations or conferences in which the medical and surgical staff evaluates the results of surgery and the patient's cardiac status prior to hospital discharge from the hospital. (Detail) [Moved from IX.A.5.f]

IV.C.4.d) and must demonstrate the ability to provide appropriate Fellow education must include experience in serving as a role modeling and providing supervision to residents and medical students. (OutcomeCore) [Moved from IV.A.5.a).(1).(d)]

IV.C.4.e) Fellows must have a formally-structured educational program in the clinical and basic sciences related to the subspecialty, pediatric cardiology. (Core) [Moved from IV.A.6.a]

IV.C.4.e).(1) The program must utilize didactic and clinical practice experience for fellow education. (Core) [Moved from IV.A.6.a).(1)]
IV.C.4.e).(2) Subspecialty Pediatric cardiology conferences must occur regularly, and must involve active fellow participation by the fellows in planning and implementation. (Core) [Moved from IV.A.6.a).(2)]

IV.C.4.e).(3) Fellow education must include instruction in: [Moved from IV.A.6.a).(3)]

IV.C.4.e).(3).(a) basic and fundamental disciplines, as appropriate to the subspecialty pediatric cardiology, such as anatomy, physiology, biochemistry, embryology, pathology, microbiology, pharmacology, immunology, genetics, and nutrition/metabolism; (Core) [Moved from IV.A.6.a).(3)]

IV.C.4.e).(3).(b) Fellow education must include instruction in pathophysiology of disease, reviews of recent advances in clinical medicine and biomedical research, and conferences dealing with complications and death, and as well as the scientific, ethical, and legal implications of confidentiality and informed consent; (Core) [Moved from IV.A.6.a).(4)]

IV.C.4.e).(3).(c) bioethics; and, must be addressed in the formal curriculum. (Core) [Moved from IV.A.6.a).(5)]

IV.C.4.e).(3).(c).(i) This should include attention to physician-patient, physician-family, physician-physician/allied health professional, and physician-society relationships. (Detail) [Moved from IV.A.6.a).(5).(a)]

IV.C.4.e).(3).(d) Fellow education must include instruction in the economics of health care and current health care management issues, such as cost-effective patient care, practice management, preventive care, population health, quality improvement, resource allocation, and clinical outcomes. (Core) [Moved from IV.A.6.a).(6)]

IV.C.4.f) Conferences must be held to review involving current pathological material specimens with clinical correlation must be held regularly, and must be closely correlated with clinical experience. (Core) [Moved from IX.B.2.]

IV.C.4.g) Multidisciplinary conferences should include physiology, pharmacology, neonatology, anesthesiology, critical care, congenital cardiothoracic surgery, and cardiac radiology (such as MRI), and adult cardiology. (Detail) [Moved from IX.B.4.]
IV.C.4.h) Fellows must participate in cardiac catheterization conferences to develop the knowledge required for decision making and planning for corrective cardiac surgery. (Core) [Moved from IX.A.5.b]

IV.C.4.i) Fellow education must include the program must engage fellows in courses, seminars, workshops, and/or laboratory experience that to provide a an appropriate background in basic cardiac physiology, cardiac pharmacology, and other fundamental disciplines related to the heart and cardiovascular system. (Core) [Moved from IX.B.3.]

IV.C.4.j) A structured curriculum must be provided to allow fellows to participate and be assessed in the following activities: [Moved from IV.A.6.b]]

IV.C.4.j.(1) provide for and obtain consultation from other health care providers caring for children; (Core) [Moved from IV.A.6.b).(1)]

IV.C.4.j.(2) contribute to the fiscally sound and ethical management of a practice (e.g., through billing, scheduling, coding, and record-keeping practices); (Core) [Moved from IV.A.6.b).(2)]

IV.C.4.j.(3) apply public health principles and improvement methodology to improve care for populations, communities, and systems; (Core) [Moved from IV.A.6.b).(3)]

IV.C.4.j.(4) lead an interprofessional health care team; (Core) [Moved from IV.A.6.b).(4)]

IV.C.4.j.(5) facilitate hand-overs to another health care provider; and, (Core) [Moved from IV.A.6.b).(5)]

IV.C.4.j.(6) lead within the subspecialty profession. (Core) [Moved from IV.A.6.b).(6)]

IV.C.4.k) The program must provide fellows with instruction and opportunities to interact effectively with patients, patients' families, professional associates, and others in carrying out their responsibilities as physicians in the subspecialty. (Core) [Moved from IV.A.6.c)]

IV.C.4.k.(1) Fellows must learn to create and sustain a therapeutic relationship with patients, and to work effectively as members or leaders of patient care teams or other groups in which they participate as a researcher, educator, health advocate, or manager. (Core) [Moved from IV.A.6.c).(1)]

IV.C.4.l) The fellowship program and residency program must complement and enhance one another. (Core) [Moved from IV.A.6.d]
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 as defined in the subspecialty-specific Program Requirements. Scholarly activities may include discovery, integration, application, and teaching.

The ACGME recognizes the diversity of fellowships and anticipates that programs prepare physicians for a variety of roles, including clinicians, scientists, and educators. It is expected that the program’s scholarship will reflect its mission(s) and aims, and the needs of the community it serves. For example, some programs may concentrate their scholarly activity on quality improvement, population health, and/or teaching, while other programs might choose to utilize more classic forms of biomedical research as the focus for scholarship.

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 grants
- 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 dissemination of scholarly activity within and external to the program by the following methods:

Background and Intent: For the purposes of education, metrics of scholarly activity represent one of the surrogates for the program’s effectiveness in the creation of an environment of inquiry that advances the fellows’ scholarly approach to patient care. The Review Committee will evaluate the dissemination of scholarship for the program as a whole, not for individual faculty members, for a five-year interval, for both core and non-core faculty members, with the goal of assessing the effectiveness of the creation of such an environment. The ACGME recognizes that there may be differences in scholarship requirements between different specialties and between residencies and fellowships in the same specialty.

IV.D.2.b).(1) faculty 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; *(Outcome)*

IV.D.2.b).(1).(a) Scholarly activities must be in a field related to the subspecialty, such as basic science, clinical care, health services, health policy, quality improvement, or education, as it relates to pediatric cardiology. *(Core)* *(Detail)* [Moved from II.B.5.e]

IV.D.2.b).(2) peer-reviewed publication. *(Outcome)*

IV.D.3. Fellow Scholarly Activity

IV.D.3.a) Where appropriate, the core curriculum in scholarly activity should be a collaborative effort involving all of the pediatric subspecialty programs in the institution. *(Detail)* [Moved from IV.B.1.a)]

IV.D.3.b) Each fellow must design and conduct a scholarly project in his or her subspecialty area-pediatric cardiology with under the guidance of the fellowship program director and a designated mentor. *(Core)* [Moved from IV.B.2.a)]

IV.D.3.c) The program must provide a scholarship oversight committee for each fellow to oversee and evaluate his or her progress as related to the scholarly activity project. *(Core)* [Moved from IV.B.2.b)]

IV.D.3.c).(1) Where applicable, the process of establishing fellow scholarship oversight committees should be a collaborative effort involving other pediatric subspecialty programs at the institution or other experts. *(Detail)* [Moved from IV.B.2.b).(1)]
IV.D.3.d) The scholarly experience must begin in the first year and continue for the entire period of training throughout the duration of the educational program. (Core) [Moved from IV.B.2.c]

IV.D.3.d).(1) Fellows must have at least 12 months dedicated to research and scholarly activity, including There must be adequate time for each fellow to allow for the development of requisite skills, project completion, and presentation of results to the scholarship oversight committee. (Core) [Moved from IV.B.2.c).(1)]

V. Evaluation

V.A. Fellow Evaluation

V.A.1. Feedback and Evaluation

Background and Intent: Feedback is ongoing information provided regarding aspects of one's performance, knowledge, or understanding. The faculty empower fellows to provide much of that feedback themselves in a spirit of continuous learning and self-reflection. Feedback from faculty members in the context of routine clinical care should be frequent, and need not always be formally documented.

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 in the context of provision of patient care or other educational opportunities. 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. Summative evaluation 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.

Feedback, formative evaluation, and summative evaluation compare intentions with accomplishments, enabling the transformation of a new specialist to one with growing subspecialty expertise.

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)
Background and Intent: Faculty members should provide feedback frequently throughout the course of each rotation. Fellows require feedback from faculty members to reinforce well-performed duties and tasks, as well as to correct deficiencies. 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.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) 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 subspecialty-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); and, (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)

Background and Intent: The trajectory to autonomous practice in a subspecialty is documented by the subspecialty-specific Milestones evaluation during fellowship. These Milestones detail the progress of a fellow in attaining skill in each competency domain. It is expected that the most growth in fellowship education occurs in patient care and medical knowledge, while the other four domains of competency must be ensured in the context of the subspecialty. They are developed by a subspecialty group and allow evaluation based on observable behaviors. The Milestones are considered formative and should be used to identify learning needs. This may lead to focused or general curricular revision in any given program or to individualized learning plans for any specific fellow.

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 along the subspecialty-specific Milestones. (Core)
V.A.1.d).(2) assist fellows in developing individualized learning plans to capitalize on their strengths and identify areas for growth; and, (Core)

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

Background and Intent: Learning is an active process that requires effort from the teacher and the learner. Faculty members evaluate a fellow's performance at least at the end of each rotation. The program director or their designee will review those evaluations, including their progress on the Milestones, at a minimum of every six months. Fellows should be encouraged to reflect upon the evaluation, using the information to reinforce well-performed tasks or knowledge or to modify deficiencies in knowledge or practice. Working together with the faculty members, fellows should develop an individualized learning plan.

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

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.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 subspecialty-specific Milestones, and when applicable the subspecialty-specific Case Logs, must be used as tools to ensure fellows are able to engage in autonomous practice upon completion of the program. (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 behaviors necessary to enter autonomous practice; (Core)

V.A.2.a).(2).(c) consider recommendations from the Clinical Competency Committee; and, (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) At a minimum the Clinical Competency Committee must include three members, at least one of whom is a core faculty member. 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.b) The Clinical Competency Committee must:

V.A.3.b).(1) review all fellow evaluations at least semi-annually; (Core)

V.A.3.b).(2) determine each fellow’s progress on achievement of the subspecialty-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)

Background and Intent: The program director is responsible for the education program and for whom delivers it. While the term faculty may be applied to physicians within a given institution for other reasons, it is applied to fellowship program faculty members only through approval by a program director. The development of the faculty improves the education, clinical, and research aspects of a program. Faculty members have a strong commitment to the fellow and desire to provide optimal education and work opportunities. Faculty members must be provided feedback on their contribution to the mission of the program. All faculty members who interact with fellows desire feedback on their education, clinical care, and research. If a faculty member does not interact with fellows, feedback is not required. With regard to the diverse operating environments and configurations, the fellowship program director may need to work with others to determine the effectiveness of the program’s faculty performance with regard to their role in the educational program. All teaching faculty members should
have their educational efforts evaluated by the fellows in a confidential and anonymous manner. Other aspects for the feedback may include research or clinical productivity, review of patient outcomes, or peer review of scholarly activity. The process should reflect the local environment and identify the necessary information. The feedback from the various sources should be summarized and provided to the faculty on an annual basis by a member of the leadership team of the program.

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, professionalism, and scholarly activities. *(Core)*

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

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

V.B.2.a) Faculty members must receive feedback from these evaluations. *(Core)* [Moved from V.B.4.]

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

**Background and Intent:** The quality of the faculty’s teaching and clinical care is a determinant of the quality of the program and the quality of the fellows’ future clinical care. Therefore, the program has the responsibility to evaluate and improve the program faculty members’ teaching, scholarship, professionalism, and quality care. This section mandates annual review of the program’s faculty members for this purpose, and can be used as input into the Annual Program Evaluation.

V.C. Program Evaluation and Improvement

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

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 self-determined goals and progress toward meeting them; *(Core)*
Background and Intent: In order to achieve its mission and train quality physicians, a program must evaluate its performance and plan for improvement in the Annual Program Evaluation. Performance of fellows and faculty members is a reflection of program quality, and can use metrics that reflect the goals that a program has set for itself. The Program Evaluation Committee utilizes outcome parameters and other data to assess the program’s progress toward achievement of its goals and aims.

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

V.C.1.c).(1) curriculum; (Core)
V.C.1.c).(2) outcomes from prior Annual Program Evaluation(s); (Core)
V.C.1.c).(3) ACGME letters of notification, including citations, Areas for Improvement, and comments; (Core)
V.C.1.c).(4) quality and safety of patient care; (Core)
V.C.1.c).(5) aggregate fellow and faculty:
  V.C.1.c).(5).(a) well-being; (Core)
  V.C.1.c).(5).(b) recruitment and retention; (Core)
  V.C.1.c).(5).(c) workforce diversity; (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) ACGME Resident/Fellow and Faculty Surveys (where applicable); and, (Core)
  V.C.1.c).(5).(g) written evaluations of the program. (Core)
V.C.1.c).(6) aggregate fellow:
  V.C.1.c).(6).(a) achievement of the Milestones; (Core)
Background and Intent: Outcomes of the documented Annual Program Evaluation can be integrated into the 10-year Self-Study process. The Self-Study is an objective, comprehensive evaluation of the fellowship program, with the aim of improving it. Underlying the Self-Study is this longitudinal evaluation of the program and its learning environment, facilitated through sequential Annual Program Evaluations that focus on the required components, with an emphasis on program strengths and self-identified areas for improvement. Details regarding the timing and expectations for the Self-Study and the 10-Year Accreditation Site Visit are provided in the ACGME Manual of Policies and Procedures. Additionally, a description of the Self-Study process, as well as information on how to prepare for the 10-Year Accreditation Site Visit, is available on the ACGME website.

V.C.3. One goal of ACGME-accredited education is to educate physicians who seek and achieve board certification. One measure of the effectiveness of the educational program is the ultimate pass rate.

The program director should encourage all eligible program graduates to take the certifying examination offered by the applicable American Board of Medical Specialties (ABMS) member board or American Osteopathic Association (AOA) certifying board.
V.C.3.a) For subspecialties in which the ABMS member board and/or AOA certifying board offer(s) an annual written exam, in the preceding three years, the program’s aggregate pass rate of those taking the examination for the first time must be higher than the bottom fifth percentile of programs in that subspecialty. (Outcome)

V.C.3.b) For subspecialties in which the ABMS member board and/or AOA certifying board offer(s) a biennial written exam, in the preceding six years, the program’s aggregate pass rate of those taking the examination for the first time must be higher than the bottom fifth percentile of programs in that subspecialty. (Outcome)

V.C.3.c) For subspecialties in which the ABMS member board and/or AOA certifying board offer(s) an annual oral exam, in the preceding three years, the program’s aggregate pass rate of those taking the examination for the first time must be higher than the bottom fifth percentile of programs in that subspecialty. (Outcome)

V.C.3.d) For subspecialties in which the ABMS member board and/or AOA certifying board offer(s) a biennial oral exam, in the preceding six years, the program’s aggregate pass rate of those taking the examination for the first time must be higher than the bottom fifth percentile of programs in that subspecialty. (Outcome)

V.C.3.e) For each of the exams referenced in V.C.3.a)-d), any program whose graduates over the time period specified in the requirement have achieved an 80 percent pass rate will have met this requirement, no matter the percentile rank of the program for pass rate in that subspecialty. (Outcome)

Background and Intent: Setting a single standard for pass rate that works across subspecialties is not supportable based on the heterogeneity of the psychometrics of different examinations. By using a percentile rank, the performance of the lower five percent (fifth percentile) of programs can be identified and set on a path to curricular and test preparation reform.

There are subspecialties where there is a very high board pass rate that could leave successful programs in the bottom five percent (fifth percentile) despite admirable performance. These high-performing programs should not be cited, and V.C.3.e) is designed to address this.

V.C.3.e).(1) At least 75 percent of the program’s graduates from the preceding six years who take the certifying examination for the first time must pass. (Outcome) [Moved from V.C.4.]

V.C.3.e).(2) The same evaluation mechanisms used in the related core pediatrics residency program should be adapted for and
V.C.3.f) Programs must report, in ADS, board certification status annually for the cohort of board-eligible fellows that graduated seven years earlier. (Core)

Background and Intent: It is essential that fellowship programs demonstrate knowledge and skill transfer to their fellows. One measure of that is the qualifying or initial certification exam pass rate. Another important parameter of the success of the program is the ultimate board certification rate of its graduates. Graduates are eligible for up to seven years from fellowship graduation for initial certification. The ACGME will calculate a rolling three-year average of the ultimate board certification rate at seven years post-graduation, and the Review Committees will monitor it.

The Review Committees will track the rolling seven-year certification rate as an indicator of program quality. Programs are encouraged to monitor their graduates’ performance on board certification examinations.

In the future, the ACGME may establish parameters related to ultimate board certification rates.

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 students, residents, fellows, faculty members, and all members of the health care team

Background and Intent: The revised requirements are intended to provide greater flexibility within an established framework, allowing programs and fellows more discretion to structure clinical education in a way that best supports the above principles of professional development. With this increased flexibility comes the responsibility for programs and fellows to adhere to the 80-hour maximum weekly limit (unless a rotation-specific exception is granted by a Review Committee), and to utilize flexibility in a manner that optimizes patient safety, fellow education, and fellow well-
being. The requirements are intended to support the development of a sense of professionalism by encouraging fellows to make decisions based on patient needs and their own well-being, without fear of jeopardizing their program's accreditation status. In addition, the proposed requirements eliminate the burdensome documentation requirement for fellows to justify clinical and educational work hour variations.

Clinical and educational work hours represent only one part of the larger issue of conditions of the learning and working environment, and Section VI has now been expanded to include greater attention to patient safety and fellow and faculty member well-being. The requirements are intended to support programs and fellows as they strive for excellence, while also ensuring ethical, humanistic training. Ensuring that flexibility is used in an appropriate manner is a shared responsibility of the program and fellows. With this flexibility comes a responsibility for fellows and faculty members to recognize the need to hand off care of a patient to another provider when a fellow is too fatigued to provide safe, high quality care and for programs to ensure that fellows remain within the 80-hour maximum weekly limit.

### 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. Graduate medical education 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, residents, and fellows must actively participate in patient safety systems and contribute to a culture of safety. (Core)

VI.A.1.a).(1).(b) The program must have a structure that promotes safe, interprofessional, 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 interprofessional learning and working environment.

VI.A.1.a).(3) Patient Safety Events

Reporting, investigation, and follow-up of adverse events, near misses, and unsafe conditions are pivotal mechanisms for improving patient safety, and are essential for the success of any patient safety program. Feedback and experiential learning are essential to developing true competence in the ability to identify causes and institute sustainable systems-based changes to ameliorate patient safety vulnerabilities.

VI.A.1.a).(3).(a) Residents, fellows, faculty members, and other clinical staff members must:

VI.A.1.a).(3).(a).(i) know their responsibilities in reporting patient safety events at the clinical site; (Core)

VI.A.1.a).(3).(a).(ii) know how to report patient safety events, including near misses, at the clinical site; and, (Core)

VI.A.1.a).(3).(a).(iii) 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 interprofessional 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 apprised 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 in order for health care professionals to achieve quality improvement goals.

VI.A.1.b).(1).(a) 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.

VI.A.1.b).(2).(a) 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.
VI.A.1.b).(3).(a) Fellows must have the opportunity to participate in interprofessional quality improvement activities. *(Core)*

VI.A.1.b).(3).(a).(i) This should include activities aimed at reducing health care disparities. *(Detail)*

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 graduate 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 (or licensed independent practitioner as specified by the applicable Review Committee) who is responsible and accountable for the patient’s care. *(Core)*

Specialty Background and Intent: Licensed independent professionals may include, but are not limited to: nurse practitioners, physician assistants, psychologists, physical and occupational therapists, speech and language therapists, dieticians, counselors, and audiologists, as appropriate.

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 many 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 immediate availability of the supervising faculty member or fellow, either on site or by means of telephonic and/or electronic modalities. Some activities require the physical
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)

Levels of Supervision

To promote oversight of 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 and patient. (Core)

VI.A.2.c).(2) Indirect Supervision:

VI.A.2.c).(2).(a) with Direct Supervision immediately available – the supervising physician is physically within the hospital or other site of patient care, and is immediately available to provide Direct Supervision. (Core)

VI.A.2.c).(2).(b) with Direct Supervision available – the supervising physician is not physically present within the hospital or other site of patient care, but is immediately available by means of telephonic and/or electronic modalities, and is available to provide Direct Supervision. (Core)

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

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’s 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)

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)

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)

Background and Intent: The ACGME Glossary of Terms defines conditional independence as: Graded, progressive responsibility for patient care with defined oversight.

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)

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)

The learning objectives of the program must:

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

be accomplished without excessive reliance on fellows to fulfill non-physician obligations; and, (Core)

Background and Intent: Routine reliance on fellows to fulfill non-physician obligations increases work compression for fellows and does not provide an optimal educational experience. Non-physician obligations are those duties which in most institutions are performed by nursing and allied health professionals, transport services, or clerical staff. Examples of such obligations include transport of patients from the wards or units for procedures elsewhere in the hospital; routine blood drawing for laboratory tests;
routine monitoring of patients when off the ward; and clerical duties, such as scheduling. While it is understood that fellows may be expected to do any of these things on occasion when the need arises, these activities should not be performed by fellows routinely and must be kept to a minimum to optimize fellow education.

VI.B.2.c) ensure manageable patient care responsibilities. (Core)

Background and Intent: The Common Program Requirements do not define “manageable patient care responsibilities” as this is variable by specialty and PGY level. Review Committees will provide further detail regarding patient care responsibilities in the applicable specialty-specific Program Requirements and accompanying FAQs. However, all programs, regardless of specialty, should carefully assess how the assignment of patient care responsibilities can affect work compression.

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)

Background and Intent: This requirement emphasizes the professional responsibility of faculty members and fellows to arrive for work adequately rested and ready to care for patients. It is also the responsibility of faculty members, fellows, and other members of the care team to be observant, to intervene, and/or to escalate their concern about fellow and faculty member fitness for work, depending on the situation, and in accordance with institutional policies.

VI.B.4.c).(1) management of their time before, during, and after clinical assignments; and, (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; and, (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 students, 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 the competent, caring, and resilient physician and require proactive attention to life inside and outside of medicine. Well-being requires that physicians retain the 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 resident 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.

Background and Intent: The ACGME is committed to addressing physician well-being for individuals and as it relates to the learning and working environment. The creation of a learning and working environment with a culture of respect and accountability for physician well-being is crucial to physicians’ ability to deliver the safest, best possible care to patients. The ACGME is leveraging its resources in four key areas to support the ongoing focus on physician well-being: education, influence, research, and
collaboration. Information regarding the ACGME’s ongoing efforts in this area is available on the ACGME website.

As these efforts evolve, information will be shared with programs seeking to develop and/or strengthen their own well-being initiatives. In addition, there are many activities that programs can utilize now to assess and support physician well-being. These include culture of safety surveys, ensuring the availability of counseling services, and attention to the safety of the entire health care team.

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)

Background and Intent: This requirement emphasizes the responsibility shared by the Sponsoring Institution and its programs to gather information and utilize systems that monitor and enhance fellow and faculty member safety, including physical safety. Issues to be addressed include, but are not limited to, monitoring of workplace injuries, physical or emotional violence, vehicle collisions, and emotional well-being after adverse events.

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

Background and Intent: Well-being includes having time away from work to engage with family and friends, as well as to attend to personal needs and to one’s own health, including adequate rest, healthy diet, and regular exercise.

VI.C.1.d).(1) Fellows must be given the opportunity to attend medical, mental health, and dental care appointments, including those scheduled during their working hours. (Core)

Background and Intent: The intent of this requirement is to ensure that fellows have the opportunity to access medical and dental care, including mental health care, at times that are appropriate to their individual circumstances. Fellows must be provided with time away from the program as needed to access care, including appointments scheduled during their working hours.
VI.C.1.e) attention to fellow and faculty member burnout, depression, and substance abuse. The program, in partnership with its Sponsoring Institution, must educate faculty members and fellows in identification of the symptoms of burnout, depression, and substance abuse, 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)

Background and Intent: Programs and Sponsoring Institutions are encouraged to review materials in order to create systems for identification of burnout, depression, and substance abuse. Materials and more information are available on the Physician Well-being section of the ACGME website (http://www.acgme.org/What-We-Do/Initiatives/Physician-Well-Being).

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, resident, or faculty member may be displaying signs of burnout, depression, substance abuse, suicidal ideation, or potential for violence; (Core)

Background and Intent: Individuals experiencing burnout, depression, substance abuse, and/or suicidal ideation are often reluctant to reach out for help due to the stigma associated with these conditions, and are concerned that seeking help may have a negative impact on their career. Recognizing that physicians are at increased risk in these areas, it is essential that fellows and faculty members are able to report their concerns when another fellow or faculty member displays signs of any of these conditions, so that the program director or other designated personnel, such as the department chair, may assess the situation and intervene as necessary to facilitate access to appropriate care. Fellows and faculty members must know which personnel, in addition to the program director, have been designated with this responsibility; those personnel and the program director should be familiar with the institution's impaired physician policy and any employee health, employee assistance, and/or wellness programs within the institution. In cases of physician impairment, the program director or designated personnel should follow the policies of their institution for reporting.

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

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

Background and Intent: The intent of this requirement is to ensure that fellows have immediate access at all times to a mental health professional (psychiatrist, psychologist, Licensed Clinical Social Worker, Primary Mental Health Nurse...
Practitioner, or Licensed Professional Counselor) for urgent or emergent mental health issues. In-person, telemedicine, or telephonic means may be utilized to satisfy this requirement. Care in the Emergency Department may be necessary in some cases, but not as the primary or sole means to meet the requirement.

The reference to affordable counseling is intended to require that financial cost not be a barrier to obtaining care.

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; and, (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)

Background and Intent: Providing medical care to patients is physically and mentally demanding. Night shifts, even for those who have had enough rest, cause fatigue. Experiencing fatigue in a supervised environment during training prepares fellows for managing fatigue in practice. It is expected that programs adopt fatigue mitigation processes and ensure that there are no negative consequences and/or stigma for using fatigue mitigation strategies.

This requirement emphasizes the importance of adequate rest before and after clinical responsibilities. Strategies that may be used include, but are not limited to, strategic napping; the judicious use of caffeine; availability of other caregivers; time management to maximize sleep off-duty; learning to recognize the signs of fatigue, and self-
monitoring performance and/or asking others to monitor performance; remaining active to promote alertness; maintaining a healthy diet; using relaxation techniques to fall asleep; maintaining a consistent sleep routine; exercising regularly; increasing sleep time before and after call; and ensuring sufficient sleep recovery periods.

VI.D.2. Each program must ensure continuity of patient care, consistent with the program’s policies and procedures referenced in VI.C.2–VI.C.2.b), in the event that 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)

Background and Intent: The changing clinical care environment of medicine has meant that work compression due to high complexity has increased stress on fellows. Faculty members and program directors need to make sure fellows function in an environment that has safe patient care and a sense of fellow well-being. Some Review Committees have addressed this by setting limits on patient admissions, and it is an essential responsibility of the program director to monitor fellow workload. Workload should be distributed among the fellow team and interdisciplinary teams to minimize work compression.

VI.E.1.a) The program director must have the authority and responsibility to set and adjust the appropriate clinical responsibilities and ensure that fellows have appropriate clinical responsibilities and an appropriate patient load (i.e., patient caps) for each fellow based on the PGY level, patient safety, resident education, severity and complexity of patient illness/condition and available support services. (Core)

Specialty Background and Intent: Insufficient patient experiences do not meet educational needs; an excessive patient load suggests an inappropriate reliance on fellows for service obligations, which may jeopardize the educational experience.

VI.E.1.a).(1) This must include progressive clinical, technical, and consultative experiences that will enable the fellows to develop expertise as a pediatric cardiology consultant in the subspecialty. (Core)

VI.E.1.a).(2) Lines of responsibility for the pediatric residents and the fellows must be clearly defined. (Core)
VI.E.1.b) The program director must ensure that fellows maintain an appropriate patient load. Insufficient patient experiences do not meet educational needs; an excessive patient load suggests an inappropriate reliance on fellows for service obligations, which may jeopardize the educational experience. (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 subspecialty and larger health system. (Core)

VI.E.2.a) Interprofessional team members should participate in the education of fellows. (Detail)

Specialty Background and Intent: Nurses, physician assistants, advanced practice providers, pharmacists, social workers, child-life specialists, physical and occupational therapists, speech and language therapists, audiologists, respiratory therapists, psychologists, and dieticians are examples of professional personnel who may be part of the interprofessional teams.

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 referenced in VI.C.2-VI.C.2.b), in the event that 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.

Background and Intent: In the new requirements, the terms “clinical experience and education,” “clinical and educational work,” and “clinical and educational work hours” replace the terms “duty hours,” “duty periods,” and “duty.” These changes have been made in response to concerns that the previous use of the term “duty” in reference to number of hours worked may have led some to conclude that fellows’ duty to “clock out” on time superseded their duty to their patients.

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, clinical work done from home, and all moonlighting. (Core)

Background and Intent: Programs and fellows have a shared responsibility to ensure that the 80-hour maximum weekly limit is not exceeded. While the requirement has been written with the intent of allowing fellows to remain beyond their scheduled work periods to care for a patient or participate in an educational activity, these additional hours must be accounted for in the allocated 80 hours when averaged over four weeks.

Scheduling
While the ACGME acknowledges that, on rare occasions, a fellow may work in excess of 80 hours in a given week, all programs and fellows utilizing this flexibility will be required to adhere to the 80-hour maximum weekly limit when averaged over a four-week period. Programs that regularly schedule fellows to work 80 hours per week and still permit fellows to remain beyond their scheduled work period are likely to exceed the 80-hour maximum, which would not be in substantial compliance with the requirement. These programs should adjust schedules so that fellows are scheduled to work fewer than 80 hours per week, which would allow fellows to remain beyond their scheduled work period when needed without violating the 80-hour requirement. Programs may wish to consider using night float and/or making adjustments to the frequency of in-house call to ensure compliance with the 80-hour maximum weekly limit.

Oversight
With increased flexibility introduced into the Requirements, programs permitting this flexibility will need to account for the potential for fellows to remain beyond their assigned work periods when developing schedules, to avoid exceeding the 80-hour maximum weekly limit, averaged over four weeks. The ACGME Review Committees will strictly monitor and enforce compliance with the 80-hour requirement. Where violations of the 80-hour requirement are identified, programs will be subject to citation and at risk for an adverse accreditation action.

Work from Home
While the requirement specifies that clinical work done from home must be counted toward the 80-hour maximum weekly limit, the expectation remains that scheduling be
structured so that fellows are able to complete most work on site during scheduled clinical work hours without requiring them to take work home. The new requirements acknowledge the changing landscape of medicine, including electronic health records, and the resulting increase in the amount of work fellows choose to do from home. The requirement provides flexibility for fellows to do this while ensuring that the time spent by fellows completing clinical work from home is accomplished within the 80-hour weekly maximum. Types of work from home that must be counted include using an electronic health record and taking calls from home. Reading done in preparation for the following day’s cases, studying, and research done from home do not count toward the 80 hours. Fellow decisions to leave the hospital before their clinical work has been completed and to finish that work later from home should be made in consultation with the fellow’s supervisor. In such circumstances, fellows should be mindful of their professional responsibility to complete work in a timely manner and to maintain patient confidentiality.

During the public comment period many individuals raised questions and concerns related to this change. Some questioned whether minute by minute tracking would be required; in other words, if a fellow spends three minutes on a phone call and then a few hours later spends two minutes on another call, will the fellow need to report that time. Others raised concerns related to the ability of programs and institutions to verify the accuracy of the information reported by fellows. The new requirements are not an attempt to micromanage this process. Fellows are to track the time they spend on clinical work from home and to report that time to the program. Decisions regarding whether to report infrequent phone calls of very short duration will be left to the individual fellow. Programs will need to factor in time fellows are spending on clinical work at home when schedules are developed to ensure that fellows are not working in excess of 80 hours per week, averaged over four weeks. There is no requirement that programs assume responsibility for documenting this time. Rather, the program’s responsibility is ensuring that fellows report their time from home and that schedules are structured to ensure that fellows are not working in excess of 80 hours per week, averaged over four weeks.

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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)

VI.F.2.b).(1) 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)
Background and Intent: While it is expected that fellow schedules will be structured to ensure that fellows are provided with a minimum of eight hours off between scheduled work periods, it is recognized that fellows may choose to remain beyond their scheduled time, or return to the clinical site during this time-off period, to care for a patient. The requirement preserves the flexibility for fellows to make those choices. It is also noted that the 80-hour weekly limit (averaged over four weeks) is a deterrent for scheduling fewer than eight hours off between clinical and education work periods, as it would be difficult for a program to design a schedule that provides fewer than eight hours off without violating the 80-hour rule.

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)

Background and Intent: Fellows have a responsibility to return to work rested, and thus are expected to use this time away from work to get adequate rest. In support of this goal, fellows are encouraged to prioritize sleep over other discretionary activities.

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)

Background and Intent: The requirement provides flexibility for programs to distribute days off in a manner that meets program and fellow needs. It is strongly recommended that fellows’ preference regarding how their days off are distributed be considered as schedules are developed. It is desirable that days off be distributed throughout the month, but some fellows may prefer to group their days off to have a “golden weekend,” meaning a consecutive Saturday and Sunday free from work. The requirement for one free day in seven should not be interpreted as precluding a golden weekend. Where feasible, schedules may be designed to provide fellows with a weekend, or two consecutive days, free of work. The applicable Review Committee will evaluate the number of consecutive days of work and determine whether they meet educational objectives. Programs are encouraged to distribute days off in a fashion that optimizes fellow well-being, and educational and personal goals. It is noted that a day off is defined in the ACGME Glossary of Terms as “one (1) continuous 24-hour period free from all administrative, clinical, and educational activities.”

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)
Background and Intent: The additional time referenced in VI.F.3.a).(1) should not be used for the care of new patients. It is essential that the fellow continue to function as a member of the team in an environment where other members of the team can assess fellow fatigue, and that supervision for post-call fellows is provided. This 24 hours and up to an additional four hours must occur within the context of 80-hour weekly limit, averaged over four weeks.

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)

Background and Intent: This requirement is intended to provide fellows with some control over their schedules by providing the flexibility to voluntarily remain beyond the scheduled responsibilities under the circumstances described above. It is important to note that a fellow may remain to attend a conference, or return for a conference later in the day, only if the decision is made voluntarily. Fellows must not be required to stay. Programs allowing fellows to remain or return beyond the scheduled work and clinical education period must ensure that the decision to remain is initiated by the fellow and that fellows are not coerced. This additional time must be counted toward the 80-hour maximum weekly limit.

VI.F.4.c) A Review Committee may grant rotation-specific exceptions for up to 10 percent or a maximum of 88 clinical and educational work hours to individual programs based on a sound educational rationale.

The Review Committee for Pediatrics will not consider requests for exceptions to the 80-hour limit to the fellows’ work week.

VI.F.4.c).(1) In preparing a request for an exception, the program director must follow the clinical and educational work hour exception policy from the ACGME Manual of Policies and Procedures. (Core)
VI.F.4.c).(2) Prior to submitting the request to the Review Committee, the program director must obtain approval from the Sponsoring Institution’s GMEC and DIO. (Core)

Background and Intent: The provision for exceptions for up to 88 hours per week has been modified to specify that exceptions may be granted for specific rotations if the program can justify the increase based on criteria specified by the Review Committee. As in the past, Review Committees may opt not to permit exceptions. The underlying philosophy for this requirement is that while it is expected that all fellows should be able to train within an 80-hour work week, it is recognized that some programs may include rotations with alternate structures based on the nature of the specialty. DIO/GMEC approval is required before the request will be considered by the Review Committee.

VI.F.5. Moonlighting

VI.F.5.a) Moonlighting must not interfere with the ability of the fellow to achieve the goals and objectives of the educational program, and must not interfere with the fellow’s fitness for work nor compromise patient safety. (Core)

Background and Intent: For additional clarification of the expectations related to moonlighting, please refer to the Common Program Requirement FAQs (available at http://www.acgme.org/What-We-Do/Accreditation/Common-Program-Requirements).

VI.F.6. In-House Night Float

VI.F.6.a) Fellows should not have more than four total weeks of night float per year, and night float should not be scheduled in consecutive weeks. (Detail)

Background and Intent: The requirement for no more than six consecutive nights of night float was removed to provide programs with increased flexibility in scheduling.

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.
The frequency of at-home call is not subject to the every-third-night limitation, but must satisfy the requirement for one day in seven free of clinical work and education, when averaged over four weeks. (Core)

VI.F.8.a).(1) At-home call must not be so frequent or taxing as to preclude rest or reasonable personal time for each fellow. (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)

Background and Intent: This requirement has been modified to specify that clinical work done from home when a fellow is taking at-home call must count toward the 80-hour maximum weekly limit. This change acknowledges the often significant amount of time fellows devote to clinical activities when taking at-home call, and ensures that taking at-home call does not result in fellows routinely working more than 80 hours per week. At-home call activities that must be counted include responding to phone calls and other forms of communication, as well as documentation, such as entering notes in an electronic health record. Activities such as reading about the next day’s case, studying, or research activities do not count toward the 80-hour weekly limit.

In their evaluation of fellowship programs, Review Committees will look at the overall impact of at-home call on fellow rest and personal time.

*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 residents or fellows at key stages of their graduate medical education.

Osteopathic Recognition
For programs seeking Osteopathic Recognition for the entire program, or for a track within the program, the Osteopathic Recognition Requirements are also applicable.

(http://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/Osteopathic_Recognition_Requirements.pdf)