ACGME Program Requirements for Graduate Medical Education in Congenital Cardiac Surgery

Summary and Impact of Interim Requirement Revisions

Proposed interim revision to include revised Common Program Requirements for Fellowships, effective July 1, 2023

<table>
<thead>
<tr>
<th>Requirement #:</th>
<th>Int.C.1.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirement Revision (significant change only):</td>
<td></td>
</tr>
<tr>
<td>Int.C. Length of Educational Program</td>
<td></td>
</tr>
<tr>
<td>The educational program in congenital cardiac surgery must be 24 months in length, preceded by completion of fellowship education as specified in III.A.1. (Core)*</td>
<td></td>
</tr>
<tr>
<td>Int.C.1. Programs wishing to provide a 24-month curriculum or other innovative educational format must document a comprehensive educational rationale for the program, which must be approved in advance by the Review Committee. (Core)</td>
<td></td>
</tr>
</tbody>
</table>

1. Describe the Review Committee’s rationale for this revision: The proposed change is in alignment with the American Board of Thoracic Surgery certification eligibility requirements.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality? The majority of existing congenital cardiac surgery fellowships were composed of one accredited year and one non-accredited year. Ensuring that both years are within an ACGME-accredited program will provide the programs and fellows common structure and experiences as well as ensure that the totality of the experience is governed by explicit policies and procedures.

3. How will the proposed requirement or revision impact continuity of patient care? No impact is anticipated.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how? The Review Committee has proposed no changes that should impact the required number of faculty members or required institutional resources; however, the increased length of education and training may have financial implications on programs that choose to match a fellow each year. Programs will need to determine if they have the patient volume/variety of patients, and/or financing, to match annually or biennially.

5. How will the proposed revision impact other accredited programs? Not applicable.

Requirement Revision (significant change only):

I.B.6. For each participating site, the program director must appoint all members of the faculty. (Core)

I.B.7. The Review Committee must approve all participating sites in advance. (Core)

1. Describe the Review Committee’s rationale for this revision:
   
   With the proposed change from a 12-month to a 24-month education and training modality, there is an increased chance that fellows may rotate outside of the primary site, and the Review Committee has proposed guidelines on the addition of participating sites and the appointment of program faculty members at those sites.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   
   These additions ensure that each site is adequately vetted by the Review Committee to confirm it provides adequate patient exposure / procedural experience / fellow education, as well as ensuring that the program director has adequate supervision and authority over the program faculty at each site.

3. How will the proposed requirement or revision impact continuity of patient care?
   
   No impact is anticipated.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   
   If a program adds sites that require the addition of program faculty members to supervise rotations at that site, additional resources may be required. Adding participating sites will require additional administrative oversite by the program director, including ensuring adequate fellow didactics, adequate resources at each site, and program and faculty member evaluation for each site.

5. How will the proposed revision impact other accredited programs?
   
   Not applicable.

Requirement #: II.A.3. – II.A.3.d)

Requirement Revision (significant change only):

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

II.A.3.d) must include documented experience in education of congenital cardiac surgery fellows. (Core)

Subspecialty-Specific Background and Intent: The Review Committee feels that the education and training of congenital cardiac surgery fellows is a complex undertaking and the
accreditation requirements are extensive. Individuals pursuing a program director role require sufficient preparation to take on the role and have the support of the department and Sponsoring Institution to devote the time and effort required to oversee a high-quality program. Therefore, the Review Committee suggests that new program director candidates have a minimum of five years’ experience as a faculty member in graduate medical education and some experience as an associate program director or other residency/fellowship program leadership experience. A letter of support outlining the Sponsoring Institution’s plan for mentoring and providing appropriate resources is required for requests for approval of program director candidates who do not have the required experience as a faculty member and/or as program leadership.

1. Describe the Review Committee’s rationale for this revision:
   With the duration of training extended, the program director will have more administrative requirements and responsibilities than previously held; the Review Committee felt it was necessary that the requirements for the position be updated to reflect the complexity and importance of the role.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   Ensuring that the program director has the requisite experience in graduate medical education and in the specialty should improve fellow education, and potentially provide greater continuity in leadership and decreased turnover.

3. How will the proposed requirement or revision impact continuity of patient care?
   No impact is anticipated.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   No.

5. How will the proposed revision impact other accredited programs?
   Not applicable.

Requirement #: III.C.1.

Requirement Revision (significant change only):

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)

III.C.1. Fellow transfers must be approved in advance of appointment by the Review Committee and by the American Board of Thoracic Surgery. (Core)

1. Describe the Review Committee’s rationale for this revision:
As the program duration has increased from 12 to 24 months, the Review Committee wanted to provide guidance for programs/fellows in the instance of a fellow transfer.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?  
Not applicable.

3. How will the proposed requirement or revision impact continuity of patient care?  
No impact is anticipated.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?  
No.

5. How will the proposed revision impact other accredited programs?  
Not applicable.

Requirement #: IV.B.1.b).(1).(a) – IV.B.1.b).(1).(a).(iii).(a).(i)

Requirement Revision (significant change only):

IV.B.1.b).(1).(a) Fellows must demonstrate proficient skills in the care of children and adults, including: (Core)

IV.B.1.b).(1).(a).(iii) performing technical operative procedures; and, (Core)

IV.B.1.b).(1).(a).(iii).(a) Fellows must document, in the ACGME Case Log System, a minimum of 75 150 major congenital cardiac surgery procedures as primary surgeon. (Core)

IV.B.1.b).(1).(a).(iii).(a).(i) A minimum of 50 of these cases must be performed as primary surgeon in the first year of the program. (Core)

1. Describe the Review Committee’s rationale for this revision:  
The proposed changes reflect the increased procedural requirements due to the extended duration of education and training. The Review Committee has also chosen to eliminate specific procedural minimum numbers whenever possible in the written requirements and instead requests that programs and fellows reference the ACGME Case Log System and/or the Documents and Resources page of the specialty section of the ACGME website for the most up-to-date minima. The Review Committee has also added several procedural experiences that represent the comprehensive scope of practice of congenital cardiac surgeons.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?  
The proposed changes to the patient care and procedural skills requirements reflect the most up-to-date scope of practice of a congenital cardiac surgeon. The changes...
reflect the increased duration of training and expectation that first-year fellows achieve some (50 of 150) of the required minimum procedures as they progress to autonomous practice. The proposed changes should ensure that the fellow is exposed to a comprehensive scope of patients and procedures during education and training, improving patient care and patient safety.

3. How will the proposed requirement or revision impact continuity of patient care?  
   No impact is anticipated.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?  
   No.

5. How will the proposed revision impact other accredited programs?  
   Not applicable.

<table>
<thead>
<tr>
<th>Requirement #: IV.B.1.b).(2).(a) - IV.B.1.b).(2).(a).(xii)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirement Revision (significant change only):</td>
</tr>
<tr>
<td>IV.B.1.b).(2).(a) Fellows must develop competence in performing congenital cardiac procedures, including: (Core)</td>
</tr>
</tbody>
</table>

IV.B.1.b).(2).(a).(i) ventricular septal defects; (Core)

IV.B.1.b).(2).(a).(i).(a) A minimum of five ventricular septal defect repairs must be performed. (Core)

IV.B.1.b).(2).(a).(ii) atrioventricular septal defects; (Core)

IV.B.1.b).(2).(a).(ii).(a) A minimum of four atrioventricular septal defect repairs must be performed. (Core)

IV.B.1.b).(2).(a).(iii) arterial switches; which must include a combination of arterial switch Norwood, Damus-Kaye-Stansel, Truncus Arteriosus repair; (Core)

IV.B.1.b).(2).(a).(iii).(a) A minimum of five of any combination of arterial switch Norwood, Damus-Kaye-Stansel, Truncus Arteriosus repair must be performed. (Core)

IV.B.1.b).(2).(a).(iv) arch reconstructions, including coarctation procedures; (Core)

IV.B.1.b).(2).(a).(iv).(a) A minimum of four arch reconstructions, including coarctation repair, must be performed. (Core)

IV.B.1.b).(2).(a).(v) repair of Tetralogy of Fallot; (Core)
IV.B.1.b).(2).(a).(v).(a) A minimum of four Tetralogy of Fallot repairs must be performed. (Core)

IV.B.1.b).(2).(a).(vi) Glenn/Fontan procedures; and, (Core)

IV.B.1.b).(2).(a).(vi).(a) A minimum of five Glenn/Fontan procedures must be performed. (Core)

IV.B.1.b).(2).(a).(vii) Systemic-to-Pulmonary Artery Shunt procedures; (Core)

IV.B.1.b).(2).(a).(vii). A minimum of five Systemic-to-Pulmonary Artery Shunt procedures must be performed. (Core)

IV.B.1.b).(2).(a).(viii) Fontan Procedures; (Core)

IV.B.1.b).(2).(a).(ix) Anomalous pulmonary venous connection repair; (Core)

IV.B.1.b).(2).(a).(x) Pulmonary artery banding; (Core)

IV.B.1.b).(2).(a).(xi) Vascular ring procedures; (Core)

IV.B.1.b).(2).(a).(xii) Coronary artery procedures; and (Core)

IV.B.1.b).(2).(a).(xiii) Re-operative procedures in patients greater than five years of age. (Core)

Subspecialty-Specific Background and Intent: Clinical experience for the congenital cardiac surgery fellow is tracked in the ACGME Case Log System; the required minima for each required experience can be found within the Case Log System and on the Documents and Resources page of the specialty section of the ACGME website.

1. Describe the Review Committee’s rationale for this revision:
   The proposed changes reflect the increased procedural requirements due to the extended duration of education and training. The Review Committee has also chosen to eliminate specific procedural minimum numbers whenever possible in the written requirements and instead requests that programs and fellows reference the ACGME Case Log System and/or the Documents and Resources page of the specialty section of the ACGME website for the most up-to-date minima. The Review Committee has also added several procedural experiences that represent the comprehensive scope of practice of congenital cardiac surgeons.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   The proposed changes to the patient care and procedural skills requirements reflect the most up-to-date scope of practice of a congenital cardiac surgeon. The changes reflect the increased duration of training and expectation that first-year fellows achieve some (50 of 150) of the required minimum procedures as they progress to autonomous practice. The proposed changes should ensure that the fellow is exposed to a comprehensive scope of patients and procedures during education and training, improving patient care and patient safety.
3. How will the proposed requirement or revision impact continuity of patient care?
   No impact is anticipated.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   No.

5. How will the proposed revision impact other accredited programs?
   Not applicable.

Requirement #: IV.C.4.c) - IV.C.4.c).(5)

Requirement Revision (significant change only):

IV.C.4.c) In order to count toward the 75-150 required major congenital cases, fellows must not include more than the maximum numbers for the following procedures: (Core)

IV.C.4.c).(1) five ten secundum atrial septal defect and/or patent foramen ovale closures; (Core)

IV.C.4.c).(2) five patent ductus arteriosus (PDA) ligations and/or divisions; (Core)

IV.C.4.c).(3) eight pulmonary valve repair/replacements (with or without transannular patch) five pulmonary artery bandings (PAB); (Core)

IV.C.4.c).(4) 10 eight right ventricle-to-pulmonary artery conduit insertions/replacements; Pulmonary Valve replacement; and, (Core)

IV.C.4.c).(5) eight five other valve repairs or replacements in patients 18 years of age or younger. (Core)

1. Describe the Review Committee’s rationale for this revision:
   The proposed change addresses the maximum of select procedures that may be counted in total case minima. The proposed revisions ensure that minimum requirements are met by the fellow, achieving the full scope of procedures within each category.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   Specifying the total number of specific cases that will be counted toward total procedural minima and toward board eligibility will ensure that the fellow has appropriate variety and depth to Case Logs and patient population. Education and training on a greater variety of patients and procedures improves fellow education, patient safety and patient care quality.

3. How will the proposed requirement or revision impact continuity of patient care?
   No impact is anticipated.
4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   No.

5. How will the proposed revision impact other accredited programs?
   Not applicable.

**Requirement #: V.A.1.b).(3) - V.A.1.b).(4) Click or tap here to enter text.**

**Requirement Revision (significant change only):**

- **V.A.1.b).(3)** Rotations exceeding two months in duration must have a mid-rotation evaluation. (Core)
- **V.A.1.b).(4)** No more than three months per year may be spent in non-congenital cardiac surgery rotations. (Core)

1. Describe the Review Committee’s rationale for this revision:
   The proposed change ensures that fellows are regularly evaluated during the program and that the majority of the duration of education and training is spent on congenital cardiac surgery rotations.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   Regular evaluation of the fellow benefits both the fellow and the faculty members who provide education and training. Requiring the majority of the program to be spent on relevant rotations ensures that fellows will have adequate exposure so that they can meet all program requirements and procedural minima, and that education and training remain focused and on a path to autonomous practice.

3. How will the proposed requirement or revision impact continuity of patient care?
   No impact is anticipated.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   No.

5. How will the proposed revision impact other accredited programs?
   Not applicable.

**Requirement #: V.A.1.e)**

**Requirement Revision (significant change only):**

**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)**
1. Describe the Review Committee’s rationale for this revision:
   As the length of the program has been proposed to increase from 12 to 24 months, the Review Committee has added in this required Common Program Requirement.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   This requirement will ensure that fellows are provided a comprehensive evaluation annually.

3. How will the proposed requirement or revision impact continuity of patient care?
   No impact is anticipated.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   No.

5. How will the proposed revision impact other accredited programs?
   Not applicable.