ACGME Program Requirements for Graduate Medical Education in Advanced Heart Failure and Transplant Cardiology Summary and Impact of Major Requirement Revisions

Background

The Review Committee for Internal Medicine is working on the major revision of the Program Requirements for the following subspecialities:

- Adult congenital heart disease
- Advanced heart failure and transplant cardiology
- Cardiovascular disease
- Clinical cardiac electrophysiology
- Critical care medicine
- Endocrinology, diabetes, and metabolism
- Gastroenterology
- Hematology
- Hematology and medical oncology
- Infectious disease
- Interventional cardiology
- Medical oncology
- Pulmonary disease
- Pulmonary disease and critical care medicine
- Rheumatology
- Sleep medicine
- Transplant hepatology

This Impact Statement document has two sections: section one contains proposed changes in the ACGME Program Requirements for all the internal medicine subspecialties noted above; section two contains proposed changes relevant to a specific subspecialty, in this case, Advanced Heart Failure and Transplant Cardiology.

In section one you will find the Review Committee's proposed changes to establish symmetry between the Program Requirements for the subspecialties and the future-focused Program Requirements for Graduate Medical Education in Internal Medicine approved in 2021 and effective July 1, 2022. Also in this section, in response to feedback received over the course of the year, is the Review Committee's proposed language for full-time equivalent (FTE) support for core faculty members. Section one will appear in every Impact Statement document for the subspecialties listed above.

The Review Committee reviewed and considered initial input and comments received from the internal medicine and subspecialty graduate medical education community for this revision. Editorial changes made to enhance clarity and better align the subspecialty requirements with the internal medicine program requirements that are not expected to have a significant impact are not itemized or discussed.

Section One

Proposed major changes in the ACGME Program Requirements for all the internal medicine subspecialities listed above.

Requirement #: I.B.5.

Requirement Revision (significant change only):

The program should ensure that fellows are not unduly burdened by required rotations at geographically distant sites. (Core)

Subspecialty-Specific Background and Intent: The Review Committee for Internal Medicine considers a participating site to be geographically distant if it requires extended travel (consistently more than one hour each way) or if the distance between the site and the primary clinical site exceeds 60 miles. The Review Committee acknowledges that some programs may need to use geographically distant sites to provide fellows with specific required educational experiences. However, required rotations to multiple geographically distant sites can be disruptive to fellow well-being, adversely impact faculty member/fellow team interactions and cohesion, and diminish participation in educational experiences (e.g., conference attendance/participation, scholarly activity, and continuity of care). Providing travel and/or housing reimbursement for fellows rotating at the remote site is one way the program can offset the potential adverse impact on fellow well-being.

- Describe the Review Committee's rationale for this revision: The Review Committee acknowledges that programs may need to use geographically distant sites for education but created this new requirement so that programs are mindful of potential burden associated with such experiences. The new Specialty-Specific Background and Intent provides suggestions for ensuring compliance with this requirement.
- How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
 This should improve fellow education and fellow wellness.
- 3. How will the proposed requirement or revision impact continuity of patient care? This should improve continuity of care because programs will be more mindful of the number of geographically distant sites being used for fellow education. Fewer distant sites should positively impact continuity of care.
- 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? This may necessitate additional institutional resources for programs that use geographically distant sites.
- How will the proposed revision impact other accredited programs?
 N/A

Requirement: I.D.1.c).(3)

Requirement Revision (significant change only):

I.D.1.c).(3) [The program, in partnership with its Sponsoring institution, must:] provide access to an electronic health record; and, (Core) [Edited and moved from I.D.1.d)]

Subspecialty-Specific Background and Intent: An electronic health record (EHR) can include electronic notes, orders, and lab reporting. Such a system also facilitates data reporting regarding the care provided to a patient or a panel of patients. It may also include systems for enhancing the quality and safety of patient care. An EHR does not have to be present at all participating sites and does not have to include every element of patient care information. However, a system that simply reports laboratory or imaging results does not

meet the definition of an EHR.

I.D.1.d) Medical Records [Edited and moved to I.D.1.c).(3)]

Access to an electronic health record should be provided. In the absence of an existing electronic health record, institutions must demonstrate institutional commitment to its development and progress toward its implementation. (Gore)

1. Describe the Review Committee's rationale for this revision:

The Review Committee revised this requirement to make clear that programs must have access to an EHR. The Review Committee believes that most programs and institutions have implemented or are in the process of implementing an EHR to more efficiently store and access patient health information and to be in compliance with other regulating entities, like the Centers for Medicare & Medicaid Services (CMS). The new Background and Intent provides further guidance on how to meet this requirement, including clarifying that an EHR does not have to be present at all participating sites, and does not have to include every element of patient care information. The same requirement and Background and Intent appear in the Program Requirements for Graduate Medical Education in Internal Medicine. As a general practice and whenever necessary, the Review Committee has developed Background and Intent language throughout the Program Requirements to provide additional clarification and eliminate the need to have a separate stand-alone Frequently Asked Questions document.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?

This will improve fellow education and patient care because fellows will have ready access to vital patient care information.

3. How will the proposed requirement or revision impact continuity of patient care?

This will continue to improve fellow education and patient care because fellows and other health care providers in the health care system will have ready access to vital patient care information.

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?

This may necessitate additional institutional resources depending on where programs and institutions are with regard to implementing an EHR.

5. How will the proposed revision impact other accredited programs?

N/A

Requirement #: II.B.1.a)

Requirement Revision (significant change only):

There must be faculty members with expertise in the analysis and interpretation of practice data, data management science, clinical decision support systems, and managing emerging health issues. (Core)

Subspecialty-Specific Background and Intent: Advances in technology are likely to significantly impact and redefine patient care, and this requirement is intended to ensure that fellows are provided with access to faculty members with knowledge, skills, and/or experience in the analysis and interpretation of practice data, and who are able to analyze and evaluate the validity of decisions from advanced data management and clinical decision support systems. Faculty members with expertise in this area can be physicians or non-physicians, and core or non-core faculty members. Institutions may already have such experts assisting programs in systematically analyzing practice data to improve patient care. The Review Committee encourages programs that cannot identify an existing internal candidate with expertise in this area to consider the option of sharing one with a program that does. The faculty member can be remotely located and associated with multiple residency programs.

1. Describe the Review Committee's rationale for this revision:

The Review Committee believes that advances in technology will significantly impact and redefine patient care. As such, programs will need to ensure there are faculty members with knowledge, skills, or experience in the analysis and interpretation of practice data, and who are able to analyze and evaluate the validity of decisions from advanced data management and clinical decision support systems. The new Background and Intent provides further guidance on how to demonstrate compliance with this requirement, including clarifying that programs may not need additional institutional resources or an additional person to meet this requirement. The same requirement and Background and Intent appear in the Program Requirements for Graduate Medical Education in Internal Medicine.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?

This will improve fellow education because it will ensure faculty members are skilled and experienced to supervise and teach these critical skills to enable fellows to provide quality patient care to their patients.

3. How will the proposed requirement or revision impact continuity of patient care?

N/A

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?

This may necessitate additional institutional resources to either educate and develop existing faculty members or recruit new ones.

5. How will the proposed revision impact other accredited programs?

N/A

Program Requirement II.B.4.b-d)

Requirement Revision (significant change only):

II.B.4.b) In addition to the program director, programs must have the minimum number of core faculty members who are there must be at least one core faculty member certified in advanced heart failure and transplant cardiology by the ABIM or AOBIM based on the number of approved fellow positions, as follows: (Core)

[Edited and combined with II.B.4.c)]

Number of Approved Positions	Minimum Number of ABIM or AOBIM
<u>1 031110113</u>	Certified Core Faculty
<u>1-3</u>	<u>1</u>
<u>4-6</u>	<u>3</u>
<u>7-9</u>	<u>4</u>
<u>10-12</u>	<u>6</u>
<u>13-15</u>	<u>8</u>
<u>16-18</u>	<u>10</u>
<u>19-21</u>	12
22-24	14
<u>25-27</u>	<u>16</u>

- II.B.4.c) In programs approved for more than three fellows, there must be at least one core faculty member certified in advanced heart failure and transplant cardiology by the ABIM or the AOBIM for every 1.5 fellows. (Core)
- II.B.4.d) At a minimum, t_The required core faculty members, in aggregate and excluding members of the program leadership, must be provided with support equal to an average dedicated a minimum of .1 FTE 10 percent/FTE for educational and administrative responsibilities that do not involve direct patient care. Additional support must be provided based on the program size as follows: (Core)

Number of Approved	Minimum Aggregate
<u>Positions</u>	Support Required
	<u>(FTE)</u>
<u><7</u>	<u>.10</u>
<u>7-9</u>	<u>.15</u>
10-12	<u>.15</u>

Subspecialty-Specific Background and Intent: The Review Committee specified the minimum required number of ABIM- or AOBIM-subspecialty-certified core faculty members and the minimum required aggregate FTE, but did not specify how the aggregate FTE support should be distributed to allow programs, in partnership with their Sponsoring Institution, to allocate the support as they see fit. As long as the requirements for the minimum number of core faculty members and the minimum aggregate FTE are met, how the aggregate FTE is distributed is flexible.

Because an associate program director is also a core faculty member, the minimum dedicated time requirements for associate program directors are inclusive of core faculty activities. An additional 10 percent/FTE for the core faculty position is not required.

For example, in total, a 12-fellow program needs a program director and six ABIM-or AOBIM-subspecialty-certified faculty members (at least one being an associate program director) and a minimum FTE of 59 percent (a minimum of 30 percent/FTE for the program director, an aggregate of 14 percent/FTE for the associate program director(s), and an aggregate of 15 percent/FTE for the remaining core faculty members). The program could choose to operationalize the aggregate FTE for core faculty members as five ABIM- or AOBIM-certified faculty members at three percent/FTE, but it can also have three members each at five percent/FTE support, or one with 15 percent/FTE and the remaining members at no FTE support.

A six-fellow program needs a program director and three ABIM- or AOBIM-subspecialty-certified faculty members (at least one being an associate program director) and a minimum FTE of 30 percent (a minimum of 20 percent/FTE for the program director, no additional aggregate FTE for the associate program director(s), and an aggregate of 10 percent/FTE for the core faculty members).

1. Describe the Review Committee's rationale for this revision:

There are two important changes in this section. The first change replaces current requirement II.B.4.c) (that there must be one core faculty member for every 1.5 fellows) with a table. The reason for making this change is to clearly delineate the minimum required core faculty and eliminate the need to calculate the number.

The second change is significant because the Review Committee is proposing a new FTE requirement for core faculty members even though the current requirement in this area has been in effect for only a short time. The Review Committee is proposing a change because directly after the current Program Requirements were approved by the ACGME Board of Directors at its February 2022 meeting, it received much input from thought leaders and organizations within the internal medicine community with concerns regarding potential unintended consequences from the recent changes. Particular concern was voiced regarding core faculty FTE in the subspecialties. The input raised important questions that hadn't surfaced during the review and comment period when the Program Requirements were vetted in the fall of 2021. As a result, the Review Committee revisited the FTE requirements for core faculty members and decided to lower the requirements currently in effect. For example, with the proposed change, a 12-fellow program will be required to have a minimum aggregate FTE of 15 percent to distribute among the core faculty. Currently, the program is required to have an aggregate minimum of 60 percent FTE. The Review Committee edited the Background and Intent language and included an example to clarify expectations with the new proposed language.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?

As reflected in the Background and Intent for Common Program Requirement II.A.2., the ultimate outcome of graduate medical education is excellence in resident/fellow education and patient care. The Common and specialty-specific Program Requirements related to non-clinical teaching and administrative time

and support are intended to ensure that the required core faculty members are able to devote a sufficient portion of their professional effort to didactics and administration of the program to ensure an effective and high-quality educational program.

- How will the proposed requirement or revision impact continuity of patient care?
 N/A
- 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?
 It is important to highlight that these requirements define the required minimum dedicated time for core faculty members' non-clinical teaching and administrative responsibilities. For some programs, the new requirements represent a decrease, while for other programs the new requirements represent an increase.

Programs for which the required minimum has decreased are encouraged to consider whether additional time and support should be provided based on factors such as program complexity and level of experience among the core faculty members. Some programs may choose to decrease non-clinical teaching and administrative time and support to the level specified in the new requirements if that is sufficient to meet the requirements of the program. Other programs may determine that the time and support currently provided is optimal and may, therefore, elect not to make a change.

Programs for which the requirements for non-clinical teaching administrative time and support have increased will need, in partnership with their Sponsoring Institution, to provide additional support for administrative time as specified in the requirements.

Both provision of support for the time required for the core faculty members' administrative responsibilities and flexibility regarding how this support is provided are important. Programs, in partnership with their Sponsoring Institution, may provide support for this time in a variety of ways. Examples of support may include, but are not limited to, salary support, supplemental compensation, educational value units, or relief of time from other professional duties. Core faculty members who are new to the role may need to devote additional time to program administrative responsibilities initially as they learn and become proficient in that role. It is suggested that during this initial period, the support described above be increased as needed.

5. How will the proposed revision impact other accredited programs?
N/A

Requirement #: IV.B.1.b).(1).(b).(i)

Requirement Revision (significant change only):

[Fellows must demonstrate the ability to manage the care of patients:] in a variety of health care settings, including inpatient and various ambulatory settings; (Core)

Subspecialty-Specific Background and Intent: Emerging models of care and needs of populations served by programs will result in fellows having educational experiences in novel or non-traditional settings. Examples of non-traditional educational settings include but are not limited to rotations on mobile buses that travel to areas of increased need, and "pop-up" health clinics within community centers.

- 1. Describe the Review Committee's rationale for this revision:
 - The Review Committee felt it was important to acknowledge that some fellow education will likely occur in settings beyond the traditional inpatient/hospital or outpatient/ambulatory settings. Examples of non-traditional educational settings that may be used for fellow education include, but are not limited to, rotations on mobile buses that travel to areas of increased need, and "pop-up" health clinics within community centers. This requirement also dovetails with the requirement for "individualized educational experiences" (IV.C.7.). The Review Committee inserted the same requirement and Background and Intent in the Program Requirements for Graduate Medical Education in Internal Medicine.
- 2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
 - This will directly improve fellow education and patient care because it ensures that those who are interested in a pursuing a career path in a particular setting after fellowship can pursue such experiences during fellowship.
- 3. How will the proposed requirement or revision impact continuity of patient care?

 This may improve continuity of patient care if patients have easier access to their physician in a novel or non-traditional educational setting.
- 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?

 N/A
- 5. How will the proposed revision impact other accredited programs? N/A

Requirement #: IV.B.1.b).(1).(b).(ii)

Requirement Revision (significant change only):

[Fellows must demonstrate the ability to manage the care of patients:] with whom they have limited or no physical contact, through the use of telemedicine; (Core)

- Describe the Review Committee's rationale for this revision:
 Although use increased in a significant way during the last two years of the COVID-19 pandemic, the Review Committee believes the use of telemedicine will continue to be used well into the future. It will continue to allow national who are
 - COVID-19 pandemic, the Review Committee believes the use of telemedicine will continue to be used well into the future. It will continue to allow patients who are not able to physically come into a hospital or clinic access to essential health care. Programs need to ensure that fellows learn and develop communication competencies to care for such patients and to coordinate care with other health care practitioners.
- 2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?

This will allow fellows to develop skills and competence communicating and providing care to patients who are not in the same physical space as they are.

- 3. How will the proposed requirement or revision impact continuity of patient care? This should improve continuity of patient care because patients who have difficulty coming to clinics will have easier access to their physician.
- 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? This should not necessitate additional institutional resources. Most programs and institutions implemented increased use of telemedicine during the COVID-19 pandemic. Modest financial costs may be required as telemedicine expands and technology innovations occur.
- 5. How will the proposed revision impact other accredited programs?
 N/A

Requirement #: IV.B.1.b).(1).(b).(iii)

Requirement Revision (significant change only):

[Fellows must demonstrate the ability to manage the care of patients:] using population-based data; and, (Core)

Subspecialty-Specific Background and Intent: The ability to interpret population data is vital to understanding population health within the context of prevention. Fellows need experience using, understanding, and analyzing population health data so that they can develop health care plans to improve health outcomes for their patients. For instance, fellows may be provided experience in analyzing and interpreting data from health registries, and understanding the local impact of infectious and non-infectious epidemics (e.g., obesity or opioid) and pandemics, as well as the important role social determinants of health have when developing and applying health care and preventive care decisions.

1. Describe the Review Committee's rationale for this revision:

The Review Committee believes that understanding population health within the context of prevention is an important area of competence for the physician practicing medicine in the future. Fellows will need experience with the use of population health data, including experience with data registry interpretation, analysis of epidemics or pandemics, and social determinants of health when making health care or preventive care decisions. The new Background and Intent provides further guidance on how to demonstrate compliance with this requirement. The same requirement and Background and Intent appear in the Program Requirements for Graduate Medical Education in Internal Medicine.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?

This will improve fellow education and patient care because it will ensure fellows are provided a broader understanding of population health when making health and preventive care decisions.

3. How will the proposed requirement or revision impact continuity of patient care?

N/A

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?

This may necessitate additional institutional resources for programs to identify individuals with expertise in population health who can teach fellows in this area.

5. How will the proposed revision impact other accredited programs?

N/A

Requirement #: IV.B.1.b).(1).(b).(iv)

Requirement Revision (significant change only):

[Fellows must demonstrate the ability to manage the care of patients:] using critical thinking and evidence-based tools. (Core)

- 1. Describe the Review Committee's rationale for this revision:
 - Advances in information and knowledge networks assisting physicians in making patient care decisions will redefine the current patient care model. The Review Committee created this requirement because it feels that programs will need to ensure fellows are educated to critically analyze and evaluate all literature and health care protocols, but especially the validity of decisions from advanced data management and clinical decision support systems. This requirement is a companion to the requirement that there must be at least one faculty member with expertise in analysis and interpretation of practice data, data management science, and clinical decision support systems (II.B.2.g)). The Review Committee inserted the same requirement in the Program Requirements for Graduate Medical Education in Internal Medicine.
- How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
 This should improve fellow education because fellows will develop their critical thinking skills and be able to provide better care to their patients.
- 3. How will the proposed requirement or revision impact continuity of patient care? **N/A**
- 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?

This should not necessitate additional institutional resources, but it may if there is a need to either educate and develop existing faculty members or recruit new ones to ensure fellows are provided education in this area.

5. How will the proposed revision impact other accredited programs?
N/A

Requirement #: IV.B.1.c).(3)

Requirement Revision (significant change only):

[Fellows must demonstrate sufficient knowledge in the application of technology appropriate for the clinical context, including evolving techniques. (Core)

<u>Subspecialty-Specific Background and Intent: Advances in technology will likely continue to make substantive changes in patient diagnosis and management. This requirement ensures that fellows will be able to gain experience and become familiar with emerging technologies.</u>

- Describe the Review Committee's rationale for this revision:
 Programs will need to continue to incorporate new technologies and teach fellows to use them to ensure that fellows are adequately educated to provide patients with appropriate care. The same requirement and Background and Intent language appear in the Program Requirements for Graduate Medical Education in Internal Medicine.
- How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
 Knowledge and experience with appropriate and emerging technology and techniques should improve quality and patient care.
- 3. How will the proposed requirement or revision impact continuity of patient care?

 This may improve continuity of patient care because patients will be provided with better diagnostic care.
- 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? Programs and institutions are incorporating new technologies as they become necessary standards of care. As such, it should not necessitate additional institutional resources.
- 5. How will the proposed revision impact other accredited programs?

N/A

Requirement #: IV.C.6.

Requirement Revision (significant change only):

The educational program must provide fellows with individualized educational experiences to allow them to participate in opportunities relevant to their future practice or to further skill/competence development in the foundational educational experiences of the subspecialty.

Subspecialty-Specific Background and Intent: The requirements acknowledge that in addition to providing fellows with broad foundational educational experiences in the subspecialty, additional educational experiences will take into account future career plans. The program director will consider demonstrated competence in the foundational areas, program resources, program aims, and a fellow's future practice plans when developing an individualized learning experience. The Review Committee does not specify the amount of time devoted to such experiences and recognizes that some fellows may need to devote the entirety their fellowship experience to achieve competence in the foundational areas of the subspecialty.

1. Describe the Review Committee's rationale for this revision:

The Review Committee felt it was important to specify that programs should offer fellows "individualized educational experiences" that will allow the fellows to explore opportunities relevant to their future practice or to further develop skills/competence. The Review Committee acknowledges that fellows progress and learn at different paces and trajectories. Some fellows may require more time to achieve competence in the foundational educational areas, which may result in less time for individualized educational experiences. Some fellows may need to devote the entirety of fellowship to achieve competence in the foundational areas. Conversely, programs may have the opportunity to allocate a significant portion of fellowship to individualized educational opportunities for those fellows who have achieved or are on target to achieve competence in the foundational areas. While true competencybased education is often conflated with time-variable education, these requirements are more about acknowledging that fellows achieve competence at different rates and require different educational experiences, and less about graduating prior to completing the duration of fellowship. A similar requirement and Background and Intent language for individualized educational experiences appear in the Program Requirements for Graduate Medical Education in Internal Medicine.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?

This change will improve fellow education because it will allow for greater individualization of fellow experiences.

3. How will the proposed requirement or revision impact continuity of patient care?

N/A

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?

N/A

5. How will the proposed revision impact other accredited programs?

N/A

Section Two

While additional editorial changes were made to enhance clarity, there were no additional substantive changes for the Program Requirements for Graduate Medical Education in Advanced Heart Failure and Transplant Cardiology. Therefore, these changes are not addressed in this Rationale and Impact Statement.