**New Application: Cardiovascular Disease (Internal Medicine)**

**Review Committee-International**

401 N. Michigan Ave. • Chicago, IL 60611 • United States • +1.312.755.7042 • www.acgme-i.org

**Submission for initial accreditation:** This Advanced Specialty PIF is for programs applying for **initial Accreditation Only** and is used in conjunction with the Accreditation Data System.

All sections of the form applicable to the program must be completed in order to be accepted for review. The information provided should describe the existing program. For items that do not apply, indicate “N/A” in the space provided. Where patient numbers are requested, provide an estimate of last year’s numbers. If any requested information is not available, an explanation must be given and it should be so indicated in the appropriate place on the form. Once the forms are complete, number the pages sequentially in the bottom center.

The program director is responsible for the accuracy of the information supplied in this form, and must sign it. It must also be signed by the designated institutional official of the sponsoring institution, who will submit the application electronically.

Review the International Foundational Program Requirements for Graduate Medical Education and Advanced Specialty Program Requirements for Graduate Medical Education in Cardiovascular Disease. The International Foundational, Advanced Specialty, and Institutional Requirements may be downloaded from the ACGME International website: [www.acgme-i.org](http://www.acgme-i.org).

For questions regarding the form’s content, e-mail [acgme-i@acgme-i.org](mailto:acgme-i@acgme-i.org).

For Questions regarding ADS, e-mail [ADS@acgme.org](mailto:ADS@acgme.org) (type the program number in the subject line).

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| Program Name:Click here to enter text. |

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**Introduction**

**Duration and Scope of Education**

|  |  |
| --- | --- |
| * + - 1. What will be the length, in months, of the educational program?   **Institution**  **Sponsoring Institution** | Choose an item. |

1. Will the cardiovascular disease fellowship function as an integral part of an ACGME-I-accredited residency in internal medicine? YES NO

Explain if ‘NO’. (Limit 250 words)

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| Click here to enter text. |

**Program Personnel and Resources**

**Faculty**

* + - 1. Will faculty members teach and supervise fellows in the performance and interpretation of procedures?

YES NO

* + - 1. If ‘YES’, will this be documented in each fellow’s record? YES NO

Explain any ‘NO’ responses. (Limit 250 words)

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* + - 1. If ‘YES’ to question 2 above, will each fellow’s record document indications, outcomes, diagnoses, and supervisor(s)? YES NO

Explain if ‘NO’. (Limit 250 words)

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**Other Program Personnel**

* + - 1. Will fellows have regular interaction with:

1. electrophysiologists YES NO
2. cardiac surgeons YES NO
   1. Will these interactions occur at catheterization conferences and in patient care planning?

YES NO

Explain any ‘NO’ responses. (Limit 250 words)

|  |
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**Resources**

1. Will the following resources be available at the primary clinical site:
   * + - 1. cardiac intensive care unit YES NO
         2. cardiac catheterization laboratories, including cardiac hemodynamics and a full range if interventional cardiology YES NO
         3. cardiac radiology laboratory including magnetic resonance imaging (MRI) and computed tomography (CT) YES NO
         4. cardiac radionuclide laboratories YES NO
         5. echocardiography laboratories, including Doppler and transesophageal echocardiography

YES NO

* + - * 1. electrocardiogram (ECG) laboratories YES NO
        2. ambulatory ECG YES NO
        3. exercise testing laboratories YES NO
        4. electrophysiology laboratories YES NO
        5. non-invasive vascular laboratory YES NO

Explain any ‘NO’ responses. (Limit 300 words)

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**Fellow appointment**

**Eligibility Criteria**

1. Describe how the program will ensure that prior to appointment, fellows will have completed an ACGME-I-accredited internal medicine program. (Limit 250 words)

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**Specialty-specific Educational Program**

**Regularly Scheduled Didactic Sessions**

1. Complete Appendix A., Formal Didactic Sessions by Academic Year, and attach to submission.

**Clinical Experience**

* + - 1. Describe how the program will ensure that fellows have at least 24 months of clinical experience, including inpatient and special experiences. (Limit 300 words)

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* + - 1. Will the clinical experience include at least four months in the cardiac catheterization laboratory?

YES NO

Explain if ‘NO’. (Limit 250 words)

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* + - 1. Will the clinical experience include at least six months in non-invasive cardiac evaluation?

YES NO

Explain if ‘NO’. (Limit 250 words)

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* + - 1. If ‘YES’ to number 3 above, will the experience include the following:
         1. three months of echocardiography and Doppler YES NO
         2. two months of nuclear cardiology YES NO
         3. at least 80 hours of daily nuclear cardiology study interpretation during the two month nuclear cardiology experience YES NO
         4. at least one month in other non-invasive cardiac evaluations, including exercise stress testing, ECG interpretation, and ambulatory ECG monitoring (these experiences can occur concurrently with other rotations) YES NO
         5. experience with cardiac tomography positron emission tomography (PET), cardiac magnetic resonance imaging (CMRI), and peripheral vascular imaging (these experiences can occur concurrently with other rotations) YES NO

Explain any ‘NO’ responses. (Limit 300 words)

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* + - 1. Will fellows have at least two months devoted to electrophysiology? YES NO

Explain if ‘NO’. (Limit 250 words)

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* + - 1. Will fellows have at least nine months of non-laboratory clinical practice activities, including:
         1. consultations YES NO
         2. cardiac care unit experiences YES NO
         3. experience with post-operative care YES NO
         4. experience with congenital heart disease YES NO
         5. experience with preventive cardiology YES NO
         6. experience with vascular medicine YES NO

Explain any ‘NO’ responses. (Limit 300 words)

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* + - 1. Describe how the program will ensure that each fellow will participate in training using simulation.

(Limit 300 words)

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* + - 1. Will fellows have formal instruction and clinical experience with the following procedures and technical skills:

1. conscious sedation YES NO
2. intra-aortic balloon counterpulsation YES NO
3. intra-cardiac electrophysiologic studies YES NO
4. MRI YES NO
5. percutaneous transluminal coronary angioplasty and other interventional procedures

YES NO

1. pericardiocentesis YES NO
2. placement and management of temporary pacemakers, including transvenous and transcutaneous

YES NO

1. programming and follow-up surveillance of permanent pacemakers and implantable cardioverter-defibrillators (ICDs) YES NO

Explain any ‘NO’ responses. (Limit 250 words)

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* + - 1. Describe how the program will ensure that each fellow performs at least 75 echocardiogram studies, interpret a minimum of 150 studies, and observe the performance and interpretation of transesophageal cardiac studies. (Limit 400 words)

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* + - 1. Describe how the program will ensure that each fellow performs at least 50 stress ECG tests.   
         (Limit 300 words)

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* + - 1. Describe how the program will ensure that each fellow performs right and left heart catheterization, including coronary arteriography, with participation in a minimum of 100 catheterizations.

(Limit 400 words)

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* + - 1. Describe how the program will ensure that each fellow has experience interpreting ambulatory ECG recordings, a minimum of 3500 ECGs, nuclear cardiology including a minimum of 100 radionuclide studies per fellow to include SPECT myocardial perfusion imaging and ventriculograms, and chest x-rays. (Limit 500 words)

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* + - 1. Will fellows have a structured continuity ambulatory clinic experience that exposes them to the breadth and depth of cardiology? YES NO
      2. Will the experience include an appropriate distribution of patients of each gender and a diversity of ages? YES NO
      3. Will fellows have an average of one half-day a week in the ambulatory clinic throughout the educational program? YES NO

Explain any ‘NO’ responses. (Limit 250 words)

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* + - 1. Describe how the program will ensure that each fellow, on average, will be responsible for four to eight patients during each half-day session and, on average, no more than eight to 12 patients during each half-day session. (Limit 300 words)

|  |
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* + - 1. Will the continuing patient care experience be interrupted by more than one month, excluding vacation?

YES NO

Explain if ‘YES’. (Limit 250 words)

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**Duty Hour and Work Limitations**

Describe how the program will ensure that direct supervision of procedures performed by each fellow will occur until competence has been acquired and documented by the program director.   
(Limit 300 words)

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| Click here to enter text. |

**ACGME-I Competencies**

**Patient Care**

1. How will graduating fellows demonstrate the ability to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health?

Describe how this will be evaluated. (Limit 300 words)

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1. How will graduating fellows demonstrate proficiency in the practice in health promotion, disease prevention, diagnosis, care, and treatment of men and women from adolescence to old age, during health and all stages of illness?

Describe how this will be evaluated. (Limit 300 words)

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1. How will graduating fellows demonstrate proficiency in the prevention, evaluation and management of:
2. arrhythmias
3. acute myocardial infarction and other acute ischemic syndromes
4. cardiomyopathy
5. cardiovascular evaluation of patients undergoing non-cardiac surgery
6. congestive heart failure
7. coronary heart disease, including acute coronary syndromes and chronic coronary heart disease
8. diseases of the aorta
9. heart disease in pregnancy

Provide an example of how proficiency will be assessed in five of the eight areas listed above.

(Limit 500 words)

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1. How will graduating fellows demonstrate proficiency in the prevention, evaluation, and management of:

a. hypertension

1. infectious and inflammatory heart disease
2. lipid disorders and metabolic syndrome
3. need for end-of-life (palliative) care
4. peripheral vascular disease
5. pericardial disease
6. pulmonary hypertension
7. thromboembolic disorders
8. valvular heart disease

Provide an example of how proficiency will be assessed in five of the nine areas listed above.

(Limit 500 words)

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| Click here to enter text. |

1. How will graduating fellows demonstrate proficiency in:
2. direct cardioversion or defibrillation
3. echocardiography
4. exercise stress testing (ECG tests)
5. right and left heart catheterization, including coronary arterioigraphy
6. placement and management of temporary pacemakers, including transvenous and transcutaneous
7. programming and follow-up surveillance of permanent pacemakers and ICDs

Provide an example of how proficiency will be assessed in four of the six areas listed above.   
(Limit 400 words)

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| Click here to enter text. |

1. How will graduating fellows demonstrate proficiency in interpretation of:
2. ambulatory ECG recordings
3. chest x-rays
4. electrocardiograms
5. nuclear cardiology, including SPECT myocardial perfusion imaging and ventriculograms.

Provide an example of how proficiency will be assessed in three of the four areas listed above.

(Limit 300 words)

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| Click here to enter text. |

**Medical Knowledge**

* + - 1. How will graduating fellows demonstrate proficiency in their knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care?

Describe how these traits will be evaluated. (Limit 400 words)

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1. How will graduating fellows demonstrate proficiency in their knowledge of the scientific method of problem solving and evidence-based decision making? (Limit 300 words)

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1. How will graduating fellows demonstrate proficiency in their knowledge of the therapeutic procedures integral to the discipline, including:
2. indications
3. contraindications
4. techniques
5. limitations
6. complications
7. interpretation of results
8. the appropriate indications for and use of screening tests and procedures

Provide an example of how proficiency will be assessed in four of the seven areas listed above.   
(Limit 400 words)

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1. How will graduating fellows demonstrate proficiency in their knowledge of the content areas of basic science, including cardiovascular:
2. anatomy
3. metabolism
4. pathology
5. physiology
6. genetic causes of cardiovascular disease
7. molecular biology

Provide an example of how proficiency will be assessed in four of the six areas listed above.

(Limit 400 words)

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1. How will graduating fellows demonstrate proficiency in their knowledge of cardiovascular pharmacology, including drug metabolism, adverse effects, indication, the effects on aging, relative costs of therapy, and the effects of non-cardiovascular drugs on cardiovascular function?

Provide an example of how proficiency will be assessed. (Limit 400 words)

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1. How will graduating fellows demonstrate proficiency in their knowledge of primary and secondary prevention of cardiovascular disease, including:
2. biostatistics
3. cardiac rehabilitation
4. cerebrovascular disease
5. clinical epidemiology
6. current and emerging risk factors

Provide an example of how proficiency will be assessed in three of the five areas listed above.

(Limit 300 words)

|  |
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| Click here to enter text. |

1. How will graduating fellows demonstrate proficiency in their knowledge of evaluation and management of patients with:
2. adult congenital heart disease
3. cardiac trauma
4. cardiac tumors
5. cerebrovascular disease
6. geriatric cardiology

Provide an example of how proficiency will be assessed in three of the five areas listed above.   
(Limit 300 words)

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| Click here to enter text. |

**Practice-based Learning and Improvement**

1. How will graduating fellows demonstrate their 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 life-long learning?

Describe how this will be evaluated. (Limit 300 words)

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| Click here to enter text. |

**Interpersonal and Communication Skills**

1. How will graduating fellows demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and other health professionals?

Describe how this will be evaluated. (limit 300 words)

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**Professionalism**

1. How will graduating fellows demonstrate a commitment to fulfilling their professional responsibilities and to adhering to ethical principles?

Describe how this will be evaluated. (Limit 300 words)

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**Systems-based Practice**

1. How will graduating fellows demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care?

Describe how this will be evaluated. (Limit 300 words)

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Appendix A. Formal Didactic Sessions by Academic Year

For each year of fellowship, please attach (Label: Appendix A) a list of all scheduled didactic courses (which includes discussion groups, seminars and conferences, grand rounds, basic science, skills labs, and journal club) at all participating institutions attended by residents using the format below. If attended by fellows from multiple years, list in each year but provide a full description only the first time it is listed.

Number sessions **consecutively** from the first year through the final year so that the scheduled didactic sessions can be easily referenced throughout the application. **Be brief and use the outline that follows.**

Year in the program:

Number: Title:

a) Type of Format (e.g. - seminar, conference, discussion groups, etc.)

b) Required or elective

c) Brief description (three or four sentences)

d) Frequency, length of session and total number of sessions

**Example:**

|  |
| --- |
| Y-1  01. Introduction to Cardiovascular Disease  a) Seminar  b) Required Y-1  c) Survey of contemporary methods and styles of cardiology including approaches to clinical work with minority populations.  d) Weekly, for 8 sessions.  02. Departmental Grand Rounds  a) Discussion groups  b) Required, Y-1, Y-2, Y-3; Elective Y-4  c) Clinical case presentations, sponsored by each departmental division, followed by discussion and review of contemporary state of knowledge. Format includes resident presentations and discussions with additional faculty discussant.  d) Twice monthly, 24 sessions |

If attendance is monitored, explain how this is accomplished and how feedback is given regarding non-attendance. (Limit 250 words)

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