

**Frequently Asked Questions: Clinical Informatics**  
**Review Committees for Anesthesiology, Emergency Medicine, Family Medicine,**  
**Internal Medicine, Medical Genetics and Genomics, Pathology, Pediatrics, Preventive Medicine, and Radiology**  
**ACGME**

Question	Answer
<b>Institutions</b>	
What is considered equivalent to an academic informatics department?  <i>[Program Requirement: I.A.4.]</i>	Any organized entity, such as an Institute, Division, Section, or Consortium, that provides regular didactic sessions, conducts research, or organizes a group of faculty members around the study of clinical or biomedical informatics is considered to be equivalent to an academic informatics department.
<b>Program Personnel and Resources</b>	
Can a program director hold an administrative medical license as allowed by his or her respective state?  <i>[Program Requirement: II.A.3.c)]</i>	The program director must be a physician; however, if medical staff appointment to practice clinical informatics is permitted with an administrative license, then it is acceptable.
Is there an expected or recommended faculty-to-fellow ratio for clinical informatics programs?  <i>[Program Requirement: II.B.1.a)]</i>	No. The Program Requirements state the minimum number of faculty members that must be assigned to the fellowship program. Once the minimum number of faculty members is met, the program must determine if that number is sufficient to administer and maintain an educational environment conducive to educating the program's fellows in each of the requisite competencies.
Can faculty members that provide didactic instruction via distance education count toward the minimum requirement of two FTE faculty members in the program?  <i>[Program Requirement: II.B.1.a)]</i>	Yes. If the program uses distance education to deliver all or most of the didactic sessions, then one of the required faculty members can be distance faculty.
What are the responsibilities that count toward a faculty member's time for the two required FTE faculty members?  <i>[Program Requirement: II.B.1.a)]</i>	A faculty member's time counted toward the two required FTE faculty members should include only those activities associated with the clinical informatics fellowship. Examples include teaching and advising fellows, supervising fellows' educational assignments, evaluating fellows, reviewing a fellow's individualized learning plan, administering the program, and serving on fellowship committees, such as the Clinical Competency Committee and/or Program Evaluation Committee.

Question	Answer
<p>Must the two required FTE faculty members be funded or voluntary?</p> <p><i>[Program Requirement: II.B.1.a)]</i></p>	<p>The faculty members included in the two required FTE positions can be either funded or voluntary, as long as they are able to devote sufficient time to the educational program and demonstrate a strong interest in the education of fellows.</p>
<p>Do non-physician faculty members count toward the two required FTE faculty members?</p> <p><i>[Program Requirement: II.B.1.a)]</i></p>	<p>Yes. Non-physician faculty members who have the requisite qualifications described in the Program Requirements can count toward the two required FTE faculty members; however, the program director must be a physician.</p>
<p>Since subspecialty certification was initiated only in fall 2013, must all of the program faculty members and the program director have current board certification in clinical informatics?</p> <p><i>[Program Requirement: II.B.2.]</i></p>	<p>The Review Committee recognizes that due to the newly-instituted board certification in clinical informatics, it will take time for the program director and all faculty members to become board certified in the subspecialty. The Committee expects that all program directors and physician faculty members eligible to be board certified in clinical informatics are actively pursuing certification, even if the process is not complete. For those who are not eligible for subspecialty certification, qualifications will be evaluated by the Review Committee on a case-by-case basis, and will include review of the qualifications outlined in the Program Requirements.</p>
<p>What are the essential characteristics of a clinical information system that provides clinical decision support (CDS)?</p> <p><i>[Program Requirement: II.D.2.b)]</i></p>	<p>A clinical information system that provides CDS is typically designed to assist physicians and other health professionals at the point of care with decision-making tasks. The CDS system should help a clinician review and filter diagnostic and treatment choices. It may include the following characteristics: 1) interactive and iterative; 2) factors in relevant and timely patient data; 3) factors in evidence-based medicine resources; and 4) provides feedback and guidance to the physician in real-time or near real-time. Feedback tools include, but are not limited to: "computerized alerts and reminders, clinical guidelines, order sets, patient data reports and dashboards, documentation templates."<sup>(1)</sup> CDS may also be used to predict patient outcomes by data-mining, determining connections between patients, and contributing to clinical research to assist with individual-patient and population-based safety, quality, and cost-effectiveness.</p> <p>(1) From <a href="http://www.amia.org/fact-sheets/clinical-decision-support">http://www.amia.org/fact-sheets/clinical-decision-support</a></p>

Question	Answer
<b>Fellow Appointments</b>	
<p>Must a fellow enroll in clinical informatics fellowships that are associated with a core residency in his or her primary specialty?</p> <p><i>[Program Requirement: III.A.1.]</i></p>	<p>All physicians who have successfully completed any ACGME-accredited residency, or a Royal College of Physicians and Surgeons of Canada (RCPSC)-, or College of Family Physicians of Canada (CFPC)-accredited residency program located in Canada, are eligible to enroll in any ACGME-accredited clinical informatics fellowship program. Admission into a specific clinical informatics fellowship is not restricted to only those who completed the core residency in the same specialty with which the fellowship is associated. Admission is also not restricted to only those residents who completed accredited programs in one of the sponsoring disciplines listed in Program Requirement I.A.1.</p>
<p>Are integrated programs (i.e., a combined residency in a specialty and a subspecialty in clinical informatics) allowed?</p> <p><i>[Program Requirement: III.A.1.]</i></p>	<p>The ACGME does not accredit combined programs.</p>
<b>Educational Program</b>	
<p>What are examples of specific topics that should be included during didactic sessions so that fellows can demonstrate knowledge of the impact of clinical information systems on users and patients?</p> <p><i>[Program Requirement: IV.A.5.b).(6)]</i></p>	<p>The American Board of Preventive Medicine (ABPM)'s <i>Clinical Informatics Study Guide and Content Outline</i> is a good resource for determining didactic content. Examples of topics for didactic sessions in this area include: impacts of clinical information systems on patient care quality; patient safety; patient satisfaction; user stress and fatigue; and user satisfaction.</p>
<p>What are examples of specific topics that should be included during didactic sessions so that fellows demonstrate knowledge of strategies to support clinician users and promote clinician adoption of systems?</p> <p><i>[Program Requirement: IV.A.5.b).(7)]</i></p>	<p>The ABPM's <i>Clinical Informatics Study Guide and Content Outline</i> is a good resource for determining didactic content. Examples of topics for didactic sessions in this area include: user training; system functionality; improved human factors; and time-motion analyses.</p>
<p>Is completion of a Master's degree in clinical informatics required for completion of the fellowship?</p> <p><i>[Program Requirement: IV.A.6.]</i></p>	<p>No. Medical knowledge outcomes required for the fellowship may be obtained through degree completion, through individual didactic courses, or through a series of regularly scheduled didactic sessions, such as seminars, lecture series, multispecialty conferences, or journal clubs throughout the duration of the program. The didactic curriculum should be rigorous, should include evaluation of fellows' knowledge, and should be taught by qualified faculty members.</p>

Question	Answer
<p>What are examples of settings in which educational assignments can be conducted?</p> <p><i>[Program Requirement: IV.A.6.e]</i></p>	<p>The specific settings used for educational assignments should be tailored to a fellow's individualized learning plan. Assignments can occur in any inpatient or outpatient medical service, such as critical care, emergency/urgent care, or surgical care, or can include consulting firms, government agencies, health record banking, industry, professional societies, remote applications, or software vendors. Fellows may complete educational assignments either on-site or virtually.</p>
<p>Can a fellow's individual learning plan be outside of his or her primary specialty?</p> <p><i>[Program Requirement: IV.A.6.f]</i></p>	<p>Yes. In consultation with the program director, fellows should develop learning plans unique to their individual interests. It is recognized that these interests may cross specialty lines and may involve multiple specialties within the health care system.</p>
<p>Do members of the interdisciplinary team have to cross departmental boundaries, or may team members be from different professions within the same department?</p> <p><i>[Program Requirement: IV.A.6.g).(1)]</i></p>	<p>Team members can be either within the same department or from multiple departments. The interdisciplinary team must be diverse enough to allow a fellow to develop competency in leadership during organizational change, in effective communication, and in providing consultation. The interdisciplinary team should also provide an opportunity for a fellow to develop competency in serving as a liaison among information technology professionals, administrators, and clinicians.</p>
<b>Evaluation</b>	
<p>Can the Learning Portfolio be a custom database designed to track fellow accomplishments as outlined, or must programs use an existing e-portfolio software application?</p> <p><i>[Program Requirement: V.A.2.b).(4).(a)]</i></p>	<p>There is no requirement for a specific e-portfolio application. Programs should determine what will best meet their needs and accomplish the overall goal of providing each fellow with appropriate and timely semiannual evaluation of performance with feedback.</p>
<b>The Learning and Working Environment</b>	
<p>How are clinical and educational work hours defined in the context of health information technology and informatics practice?</p> <p><i>[Program Requirement: Section VI.]</i></p>	<p>The ACGME defines clinical experience and education as all clinical and academic activities related to the fellowship program, and includes all time spent on activities that are required by the Program Requirements, such as time on committees, time spent in research activities, required tasks performed at home, and time spent maintaining clinical skill in a fellow's primary specialty area. Time spent in class or in didactic sessions, either in person or online, counts toward clinical and educational work hours. Clinical and educational work hours do not include reading, studying, and academic preparation time, such as time spent preparing presentations or journal club. Additional information on the ACGME clinical and educational work hour requirements can be found on the Common Program Requirements section of the ACGME website.</p>