

# The Clinical Informatics Subspecialty

Read news release Sept. 22, 2011 '[Clinical Informatics Becomes a Medical Subspecialty Following ABMS Decision.](#)'

## Background

AMIA is the center of action for biomedical and health informatics professionals. In 2005, AMIA concluded that demand was growing among physicians for formal training and certification in clinical informatics. In March 2007, with financial support from the Robert Wood Johnson Foundation, AMIA launched an 18 month process to define the core content of the subspecialty of clinical informatics and the training requirements for proposed clinical informatics fellowships. Upon approval of these documents by the AMIA Board in November 2008, AMIA contacted several medical specialty boards to assess their interest in and willingness to sponsor an application to the American Board of Medical Specialty (ABMS) to create an approved certification process for the clinical informatics subspecialty. In July 2009, the American Board of Preventive Medicine (ABPM) agreed to sponsor the application for a new subspecialty examination, and, in March 2010, ABPM submitted a formal application to ABMS to create the subspecialty certification. After an extensive review by the ABMS specialty boards and the ABMS Committee on Certification (COCERT), the proposal was approved by the ABMS Board in a vote on September 21, 2011.

## Definition of the Clinical Informatics Subspecialty

Physicians who practice clinical informatics (increasingly known as informaticians) collaborate with other health care and information technology professionals to promote patient care that is safe, efficient, effective, timely, patient-centered, and equitable. Clinical informaticians transform health care by analyzing, designing, implementing, and evaluating information and communication systems that enhance individual and population health outcomes, improve patient care, and strengthen the clinician-patient relationship. Clinical informaticians use their knowledge of patient care combined with their understanding of informatics concepts, methods, and tools to:

- assess information and knowledge needs of health care professionals and patients;
- characterize, evaluate, and refine clinical processes;
- develop, implement, and refine clinical decision support systems; and
- lead or participate in the procurement, customization, development, implementation, management, evaluation, and continuous improvement of clinical information systems such as electronic health records and order-entry systems.

## Rationale for the Clinical Informatics Subspecialty

Successful health information system implementation depends in large measure on the knowledge and skills of the individuals who design, integrate, and implement these systems. While clinical informatics is multi-disciplinary in nature, there is a particular need for physicians

who understand the care process, informatics concepts, and information technology. Creation of the formal subspecialty will help to standardize key elements of clinical informatics training programs and will likely increase the number of training opportunities. Further, it will provide an immediately recognized credential for organizations seeking to hire clinical informaticians. Finally, this initiative is consistent with the current national emphasis on strengthening the health information technology workforce.

## **Anticipated Timeline**

The ABPM, in collaboration with cosponsoring boards that include the American Board of Pathology, is now involved in creating an examination committee that will develop the test questions for board certification. The ABPM will also need to provide formal guidelines to applicants regarding board eligibility, maintenance of certification, and related issues. Watch the ABPM web site at <http://www.theabpm.org> *external link* for information as details are developed. The earliest the clinical informatics subspecialty board exam could be administered is fall 2012 with the first certificates awarded in January 2013. Some delay beyond those dates is possible depending on the exam development process.

## **References**

*Defining the Medical Subspecialty of Clinical Informatics.* Don E Detmer, John R Lumpkin, Jeffrey J Williamson. JAMIA 2009;16:167-168 doi:10.1197/jamia.M3094

*AMIA Board White Paper: Core Content for the Subspecialty of Clinical Informatics.* Reed M Gardner, J Marc Overhage, Elaine B Steen, Benson S Munger, John H Holmes, Jeffrey J Williamson, Don E Detmer, for the AMIA Board of Directors. JAMIA 2009;16:153-157 doi:10.1197/jamia.M3045

*AMIA Board White Paper: Program Requirements for Fellowship Education in the Subspecialty of Clinical Informatics.* Charles Safran, M Michael Shabot, Benson S Munger, John H Holmes, Elaine B Steen, John R Lumpkin, Don E Detmer, for the AMIA Board of Directors. JAMIA 2009;16:158-166 doi:10.1197/jamia.M3046

**AMIA is developing content for preparatory coursework, both online and in-person for those who are interested in sitting for the first CI board exam.**