President's column: subspecialty certification in clinical informatics

INFORMATICS PROFESSIONALS, LEADING THE WAY.

Shortly after Don Detmer joined AMIA as its first full-time professional president and CEO, he became aware of the growing demand among clinical informaticians for a process by which they could be credentialed to show their competence and accomplishments in the field. Such credentialing would require consensus on the design and content of training programs for clinical informaticians, and AMIA seemed to be especially well positioned to develop the materials necessary to promote the process. In early 2007, with support from the Robert Wood Johnson Foundation, AMIA embarked on an 18-month process to define the field of clinical informatics, its core competencies, and the rationale for recognizing a formal subspecialty in the area. Several AMIA members were invited to serve on the study groups that produced key documents that were ultimately approved by the AMIA board of directors and published in J Am Med Inform Assoc. One dealt with the core competencies in the field, helping to define the knowledge base that needs to be reflected in any curriculum for training individuals in the burgeoning discipline.² The second focused on recommendations for program requirements in the creation and promulgation of fellowship opportunities for subspecialty training.³

In parallel with these activities, Dr Detmer was pursuing the engagement of AMIA with the Council of Medical Subspecialty Societies (CMSS), which is an umbrella organization for all the physicians' specialty societies, representing their shared interests and collaboration. Not only was Don successful in representing the case for AMIA's election as a full member in CMSS. but he was elected to their board and served as CMSS treasurer for several years. The strong support for clinical informatics among the established medical professional societies led Don to begin discussions with some of the associated clinical boards about their interest in proposing a formal subspecialty certification examination in clinical informatics. Although there was broad support from the boards (which together are coordinated by the American Board of Medical Specialties, ABMS), it was the American Board of Preventive Medicine (ABPM) that expressed particular interest in serving as the sponsoring board for a clinical informatics subspecialty certification.⁴ They asked AMIA to work with them on preparing the data and back-

The purpose of the Messages from AMIA section is for AMIA to communicate and involve its current and potential members in AMIA. The messages on these pages reflect the goals and direction of AMIA's board of directors and leaders only. These pages are designed to inspire members and readers to connect with the association on strategic objectives and activities. We hope you will find them a useful tool for keeping connected to AMIA leadership. We welcome your thoughts and feedback.

Note that the clinical professional societies, which are similar to AMIA, generally provide education and services to their members but do not themselves certify clinicians in the specialty. Therefore, for example, the American College of Physicians is the professional organization for specialists in internal medicine, but it is the American Board of Internal Medicine that oversees the board certification process for internal medicine physicians.

ground materials that would serve as the basis for a formal proposal to ABMS, which would need to approve the creation of a new subspecialty. Shortly after I joined AMIA in 2009, I made a presentation to the ABPM on the rationale for a formal subspecialty in clinical informatics and we were delighted when members of that board voted to sponsor the proposal to ABMS. The previously mentioned J Am Med Inform Assoc articles^{1–3} were particularly helpful in the process, as they demonstrated the nature of the clinical field and the kinds of competencies that could be formally evaluated in a board examination.

Once the proposal had been submitted to ABMS in 2010, a multistep evaluation began, including an assessment and approval by each of the member boards. What made the clinical informatics proposal especially unusual was the notion that it should be possible for a physician to be certified in the clinical informatics subspecialty regardless of which board had provided the clinician's primary certification. Of course, to those of us in the informatics field, it makes perfect sense for a physician to be an effective clinical informatician, regardless of whether the person's primary specialty is internal medicine, family practice, radiology, surgery, pathology, or any of the other fields represented by boards within the ABMS. Typically, all subspecialty candidates for a given examination were previously certified by the same parent board (eg, all cardiology subspecialists must first pass their board exams in internal medicine).

With the support from all the boards, the proposal was referred by ABMS to its committee on certification, which then considered the proposal in great detail. There were two 'readings' scheduled in February and July of 2011 at ABMS headquarters in Chicago where I joined the executive director of ABPM to answer questions and generally to support the proposed subspecialty. One recurring question was whether informatics was sufficiently 'clinical' to qualify as a medical specialty. In parallel, we had been discussing the proposed subspecialty with the Accreditation Council on Graduate Medical Education (ACGME), which accredits training programs in medicine (residencies and fellowships) and which accordingly would be the accrediting body for our informatics training programs. The ACGME, after learning more about our programs at the 2010 meeting of the AMIA Academic Forum in Denver, had adjusted their own definition of the word 'clinical' as follows:

'Clinical: Refers to the practice of medicine in which physicians assess patients (in person or virtually) or populations in order to diagnose, treat, and prevent disease using their expert judgment. It also refers to physicians who contribute to the care of patients by providing clinical decision support and information systems, laboratory, imaging, or related studies.'

This definition, once adopted by the ACGME, became strong evidence that others viewed informatics as 'clinical' and led to a positive vote by the committee on certification regarding the clinical informatics subspecialty proposal. This key approval led to early coverage in the medical press⁵ and generated great enthusiasm by individuals who had been monitoring the proposal and approval process for over 2 years. Finally, on September 21, 2011, the full board of the ABMS approved the

new subspecialty and this long 'birthing' process was able to enter a new phase.

The current plan is for clinical informatics subspecialty board examinations to be offered by ABPM starting in the autumn of 2012. For the first 5 years, practicing clinical informaticians will be able to apply for board eligibility based on their work and experience in the field. Formal criteria for such practice-based eligibility will be announced by the ABPM. One requirement, of course, will be that the applicant must already be board certified in a primary specialty by one of the ABMS boards. After the first 5 years, all candidates will need to have completed a fellowship in clinical informatics that is accredited by the ACGME. There is thus a 5-year period during which new and existing fellowships will need to be created and assessed by ACGME so that their graduates will be board eligible. The AMIA Academic Forum has been working with existing training programs to provide education about the ACGME accreditation process and to assist in the adaptation of existing fellowships to comply with ACGME requirements.

Although the certification process will be overseen by the ABPM and one or more co-sponsoring boards (the American Board of Pathology has already asked to be a co-sponsor, and two other boards have also expressed an interest in doing so), AMIA will be providing support in a variety of ways. First, we solicited self-nominations from AMIA members who are interested in serving on the ABPM clinical informatics examination committee, which will be responsible for writing examination questions based on the identified competencies for those who wish to be board certified. Several names were forwarded to the ABPM and we expect several AMIA nominees to be appointed to the question development committee. Second, AMIA is already well along in designing board review courses that we will offer for those who are preparing to take the certifying examination.

We have also recognized that many superb clinical informaticians will be ineligible for the subspecialty certification being offered by the ABMS/ABPM process. In particular, the certifying examination will be unavailable to non-physicians or to physicians who lack specialty certification through one

of the ABMS boards. Nurses, pharmacists and PhDs who are working full time in clinical informatics environments clearly need a similar kind of certifying opportunity, and AMIA is committed to developing such options for all our members who wish to pursue clinical informatics certification.

With these additional potential candidates for certification in mind, AMIA's Academic Forum has appointed a task force to consider options for providing a certifying process for those who are ineligible for the ABMS board examination. That task force will be reporting soon to the forum leadership, and in turn to the AMIA board. As plans develop and we have definite news to report, information will be provided to members through our regular newsletters and on the clinical informatics page on the AMIA web site. We welcome your comments and suggestions.

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