

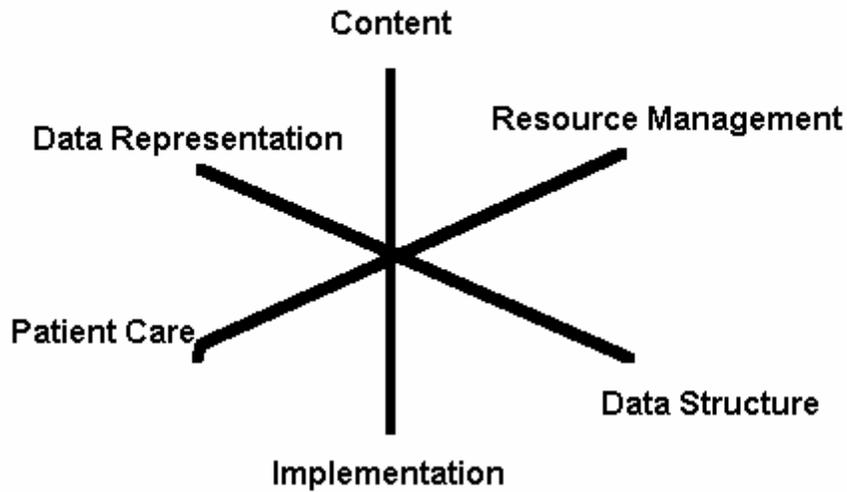
Clinical Laboratorians Must Rise to the EHR Challenge!

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Fellow clinical laboratorians, the recent months have produced real challenges to healthcare and the role of the clinical laboratory in it. As you may have read, the federal government began this challenge in April of 2004 with the appointment of the National Coordinator for Health Information Technology in the DHHS Office of NCHIT – ONCHIT in the person of Dr David Brailer. That office has taken the initiative to replace the ANSI Health Informatics Standards Board (ANSI HISB) which was formed in 1996 to coordinate and harmonize informatics standards supporting healthcare as was originally envisioned in 1991 with the Institute of medicine land mark report on the “Computer-based Patient Record - CPR”. AACC participated in the formation of ANSI HISB. Unfortunately, ANSI HISB became consumed with talking about the problem. The various stakeholders either did not have the influence to, or did not want to influence activities so that they lead to, effective action. ONCHIT’s steps, thus, led to the formation of a social entity and a technical entity that would carry out the challenges identified by the social entity. The American Health Information Community (AHIC) is the social entity and the Health Information Technology Standards Panel (HITSP) is the technical entity. The formation of these bodies began in Sept 2005 and was completed by January 2006 when the first working meetings were held; The earlier ANSI HISB was disestablished and replaced by the HITSP as of 2006 and HITSP has met and produced initial working documents since the beginning of 2006. The AHIC produced a set of beginning “Use Cases” during the Fall of 2005 and the HITSP is now producing analyses of the needed informatics standards to allow implementation of the networked architectures needed to support the system interoperability that would achieve the Use Case capabilities.

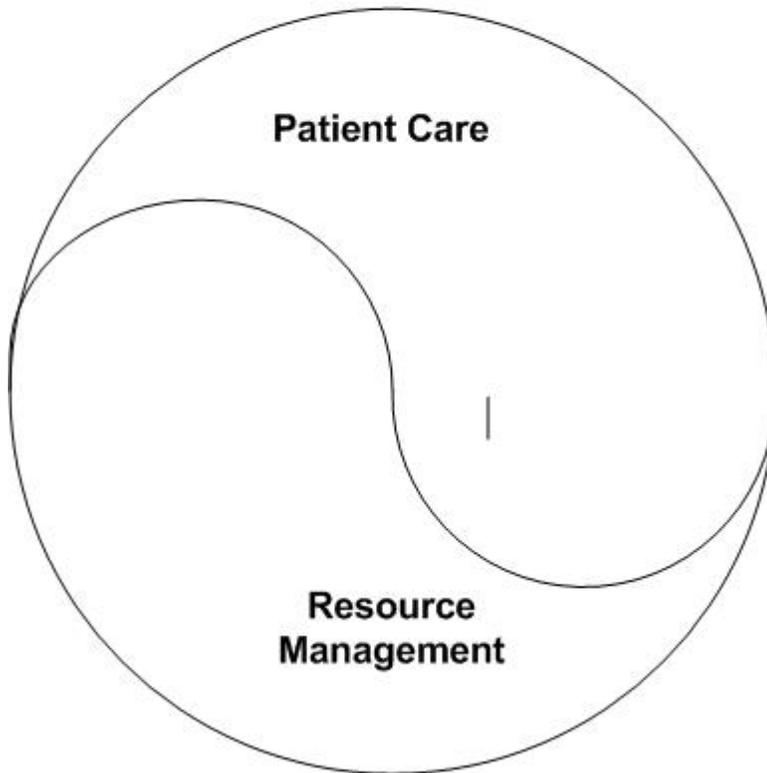
The clinical laboratory professional specialties and organizations now need to be fully involved in contributing to both the standards framework and the educational programs in the informatics issues that will realize the identified goals. The AACC’s LIS MID has long recognized the need for full involvement of all clinical laboratory subspecialties since each has a role in supporting the practitioner in the various care settings. The Division has also recognized the need for collaborative work with the other health professional disciplines in defining and documenting the conceptual content and the information engineering disciplines in defining and documenting the entire implementation process. At the upcoming AACC Annual meeting you will have the opportunity to hear speakers who will probe all of these dimensions and who have an appreciation of the input from clinical laboratorians over the past twenty years as well as the various ways that they can help practitioners provide optimal healthcare to the public. They also appreciate the challenge to healthcare to deal with the multiple dimensions of perspectives that are illustrated in the figure below.

Dimensions of Health Informatics



In the present challenge the historic emphasis on Resource Management, primarily represented by Healthcare Financing subjects, must be balanced by the mutual dependence that originates in the Patient Care dimension enabled by Resource Management realities of healthcare shown in the figure below. The ONCHIT Program utilizes the National Health Information Network (NHIN) as the focal capability toward which it strives. The earlier DHHS efforts directed at the Health Information Portability and Accountability Act (HIPAA) dealt with the common conventions needed to manage the Resource Management Healthcare Financing Communications but this emphasis did not lead to the anticipated interest in the Patient Care issues. The focus now upon the NHIN involves a balanced effort regarding the two key perspectives. Clinical Laboratorians must now master the knowledge areas in all of the six dimensions noted above in order to provide optimal support for practitioners; likewise, practitioners will be challenged to gain their optimal profile of mastered knowledge areas. The EHR will thus challenge all health professional disciplines and there will be no escape. As the above figure shows there are Conceptual Content issues and the are technical Implementation issues (which have received an inordinate emphasis since the 1991 IOM report).

Inseparability of Healthcare Information



New realizations are arising that the key focus is the capture of observations regarding the care of individual patients during the entire care process and that the resource management implications can be largely derived and managed separately in an integrated fashion. Healthcare Enterprises must craft information architectures that serve their business environment and processes but all six dimensions must be considered in doing so. For example, the frontpage article in the May issue of AACC's Clinical Laboratory News "Clinicians vs Lab: Hot Buttons" illustrates exactly the range of issues that must be dealt with because these issues are critically dependent upon information and how it gets to both practitioners and laboratorians. Currently, the HITSP is considering an AHIC developed Use Case: "EHR Lab Results" that is merely a consideration of the reporting of Lab results back to the requestor in the same fashion that has been historically done for paper records. That Use Case develops little of the advantage to healthcare that could be provided by the EHR and information technology at a time when there is much public emphasis on moving to an ENR environment. Because a truly enlightening Use Case will actively involve knowledgeable clinical laboratorians who appreciate all of the details involving the requests for clinical services and the provision of full meaning regarding the measurements made (such as was illustrated in the May 2006 CLN article), encouragement of such involvement is critical to realizing the EHR benefits to Patient Care. The best avenue for readers of this article to become participants is to contact the

officers of your active AACC Division, whatever that may be, and ask to be connected. The AACC LISMID will work to facilitate participants from all Divisions.

The conceptual content issues in developing the communication framework for clinical laboratorians with practitioners will include data structure issues as well as vocabulary issues that also include a unified set of measurement names and associated name profiles. These conventions will need to be placed in the context of the patient information needed in various clinical decision support situations. Patient Health Condition/Problem names are related to Diagnosis names which are used during the Encounter Assessment Phase as attributes that influence requested lab services and the supporting justification rationale. Both Data Structure and Data Representation knowledge input from clinical laboratorians will be required to ensure an effective set of capabilities. For monitoring of the Treatment Phase, additional knowledge areas may also be involved. Thus, participation at this critical time is a most important challenge to clinical laboratorians.