



Curriculum Inventory Working Group Charter

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Goal

The development of health professions education curricula is a time consuming and complex task. Educational reform efforts are encouraging the development of non-traditional curricula that use novel and innovative methods for teaching and assessment. In many institutions there is a push towards competency-based learning as the cornerstone of curriculum development efforts. In addition, health professions reform has mandated that new content or competencies be integrated into the curriculum, including cultural competencies, patient safety, team-based learning, systems-based practice, etc.

In parallel, a predicted shortage of physicians has resulted in the growth of new medical schools in the US and other countries. Such schools have the herculean task of developing a medical school curriculum from scratch.

Institutions could facilitate their curriculum reform and development efforts by sharing curricular data with one another. A shared curriculum inventory would allow institutions to find out how other institutions are addressing common problems, implementing reforms, and integrating novel teaching and assessment techniques into the curriculum. A technology standard for core curricular data is essential to enable sharing of curricular information and to accelerate the dissemination of curricular innovations.

Context

MedBiquitous develops information technology standards for healthcare education and competence assessment. Through Working Groups and a Standards Committee, MedBiquitous members are creating a technology blueprint for healthcare education and competence assessment. Based on XML and Web services standards, this blueprint will weave together the many activities, organizations, and resources that support the ongoing education, performance, and assessment of healthcare professionals.

The Association of American Medical Colleges recently convened focus groups of educational experts, technology developers, external vendors, and medical school curriculum administrators to discuss the development of a new Curriculum Inventory system designed to integrate with existing curriculum management systems most schools have in place. Such a system would collect a subset of data about a

curriculum for purposes of benchmarking and educational research. Data will likely include competencies and objectives, assessment and educational methods, etc.

Launched in 2005, the MedBiquitous Competencies Working Group (http://www.medbiq.org/working_groups/competencies/index.html) has developed a conceptual whitepaper that outlines how curricula may be linked to a competency framework that in turn drives education and assessment. Two specifications have emerged from this conceptual framework: the MedBiquitous Competency Object and MedBiquitous Competency Framework specifications. The MedBiquitous Competency Object specifies how one may define a single competency. The MedBiquitous Competency Framework allows one to create relationships, hierarchical and non-hierarchical, among sets of related competencies. These specifications will facilitate the integration of competencies, outcomes, and objectives into the curricular data.

Standards Environment

At present the author of this proposal does not know of any direct conflicts with existing standards development efforts, but the following work may prove useful.

Metadata for Learning Opportunities - Advertising (MLO-AD) is an effort supported by CEN, the European Committee for Standardisation. The goal of MLO-AD is to provide information about a learning opportunity, to enable the learner to make a decision if there is a need for more information about the learning opportunity, and where to find that information. Each learning opportunity has a provider, a set of descriptors about the opportunity, and a set of descriptors about a particular instance of the opportunity. The standard may be extended and customized to a domain. Refinements have been made to the standard to facilitate the representation of degree programs for the Bologna process. The standards work was started in 2008; the current status is unknown and at the time of writing, draft specifications were inaccessible. Further research may be undertaken as part of the standards development process. See: <http://www.cen-itso.net/Main.aspx?put=1042&AspxAutoDetectCookieSupport=1>

Healthcare Learning Object Metadata may provide useful metadata descriptors as well. See: http://www.medbiq.org/std_specs/standards/index.html#HCLOM

None of the existing specifications address all the requirements specific to conveying the curricular data for a health professions program. The standards listed could support some aspects of Curriculum Inventory standard for the health professions.

Scope

We propose developing requirements and XML data specifications for curriculum inventory data. A variety of paradigms (problem-based learning, traditional curricula, outcome-based curricula, etc.) for medical education should inform the structure of the specification.

Whenever possible, the group will leverage useful specifications developed by other organizations. The MedBiquitous Technical Steering Committee will offer guidance and technical support when needed.

The specifications and services created by this working group may serve as foundation pieces for other specifications designed by MedBiquitous and will be architected to allow for other parts of the MedBiquitous blueprint for healthcare education and competence assessment and may be submitted to ANSI as part of the ANSI-accredited standards development process..

The working group may develop guidelines to provide guidance to healthcare educators wishing to implement the standards. It is expected that the working group will further refine this scope outlined in this charter to best meet their goals.

Work Plan and Accelerated Development

We propose bi-weekly teleconference to accelerate this important work. Face-to-face meetings may be convened upon occasion. Working Group members or staff will perform much of the group's work independently with member comments submitted to a discussion list and documents shared via wiki.

The initial specification will be produced as part of an accelerated standards development project funded by the Association of American Medical Colleges. A draft specification for implementation will be delivered on or about August 2011, following which systems implementing the standard will be developed by the AAMC and curriculum management system developers interested in sending data to the new portal. Interoperability tests may be conducted as part of the implementation process. It is expected that development on the specification will continue past June 2011 as part of the iterative MedBiquitous Standards Development process.

References

Curriculum Management and Information Tool. Accessed October 4, 2010.

<http://www.aamc.org/meded/curric/start.htm>

MedBiquitous Competency Object Specification, accessed October 4, 2010.

http://www.medbiq.org/working_groups/competencies/index.html

MedBiquitous Competency Framework Specification, accessed October 4, 2010.

http://www.medbiq.org/std_specs/specifications/index.html#Competencies

MedBiquitous Healthcare Learning Object Metadata, accessed October 4, 2010.

http://www.medbiq.org/std_specs/standards/index.html#HCLOM

Metadata for Learning Opportunities - Advertising (MLO-AD), accessed October 4, 2010.

<http://www.cen-Itso.net/Main.aspx?put=1042&AspxAutoDetectCookieSupport=1>