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## *Competency Models In Action:*

### **Growth Sectors x Two: Miami University of Ohio's Competency-Based Health Information Technology Program**

March 2012

#### **Introduction**

If imitation is the sincerest form of flattery, then validation has to be a close second. Miami University of Ohio's (MUOhio) new Bachelor's completion program in Health Information Technology (HIT) further validates the Electronic Health Records Competency Model developed collaboratively by ETA and industry experts. Although the university did not use ETA's model as a conceptual framework in developing their program, there is substantial overlap between the competencies embedded in the university's industry-informed program and ETA's own model. This outcome adds support to ETA's independent efforts to develop realistic competency models that truly reflect labor market needs.

#### **The Workforce Need**

Ohio's major industrial sectors—automotive and manufacturing—have been hit hard by the economic downturn. In contrast, the growth prospects for both the health care and information technology sectors are strong. Creating a health information technology program that combined the workforce skill and knowledge requirements of both sectors promised a win-win proposition for students, job seekers and incumbent workers. “According to the Bureau of Labor Statistics, employment growth in the health information technology area is projected to increase by 21 percent through 2020.”<sup>1</sup> Combining these two sectors together in the health information technology field promised a win-win proposition for students, job seekers and incumbent workers.

#### **How They Did It**

Cincinnati State Technical and Community College (CSTC) received an ARRA grant to enhance the Health Careers Collaborative of Greater Cincinnati (HCC), a program designed to develop employer-driven career pathways for jobs in the health care industry. As a part of that effort, MUOhio received a sub-grant from CSTC to create courses for HIT based on identified industry growth projections. MUOhio and CSTC have a long history of collaboration, and that was clearly manifested in the development of HIT programs at both institutions. MUOhio and CSTC staff continue to meet on a regular basis, and conduct co-training for their respective faculties on the new program.

In researching the competencies that were requisite in developing the curriculum for these programs, CSTC benefitted from the expertise of the long established HCC comprised of representatives from the higher education community, employer partners, and community

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<sup>1</sup> *Occupational Outlook Handbook, 2012-2013*, <http://www.bls.gov/emp/home.htm>

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based organizations. “Employers indicate that this will be a growth field,” says Lawra Baumann, HCC Executive Director and Director of Grant Administration at CSTC. “It’s not easy to identify discrete career paths. We’re trying to determine what the occupations and skills sets are to meet needs. The jobs are still being created as the technology develops. We’re in evolution at the moment. We’re building a proactive degree program.”

A number of critical findings surfaced from a series of focus groups with HCC members. The findings informed program development—e.g., the need for requisite soft skills as part of the curricula, the recognition that there will be demand and an entry point for all levels of graduates (stackable credentials), and the importance of the HIT career pathway for incumbent IT and healthcare workers that will enhance employability.

Concurrently, MUOhio faculty met with professionals in the health information and technology fields: medical personnel, information technology consultants, professional trainers, and individuals in healthcare-related professions. They used the information derived from these conversations, in tandem with the feedback from the HCC focus group members, in developing their HIT program.

The MUOhio program was approved by the State Board of Education in the August of 2011 and has been intensively marketed through print and radio resources. The program went live on January 1, 2012, with the first students beginning their studies in the second semester of the 2011-2012 academic year. About 60 pre-majors have enrolled in the 4-year program at the Middletown and Hamilton regional campuses of the university.

“These regional campuses are uniquely positioned to provide students with the multiple competences that HIT occupations require since the engineering, computer science, computer information technology and nursing disciplines are housed in the same division,” says Donna Evans, Instructor/Advisor, Computer and Information Technology at MUOhio. “Citizens will get the outcomes they want from their educational institutions. Graduates will find jobs.”

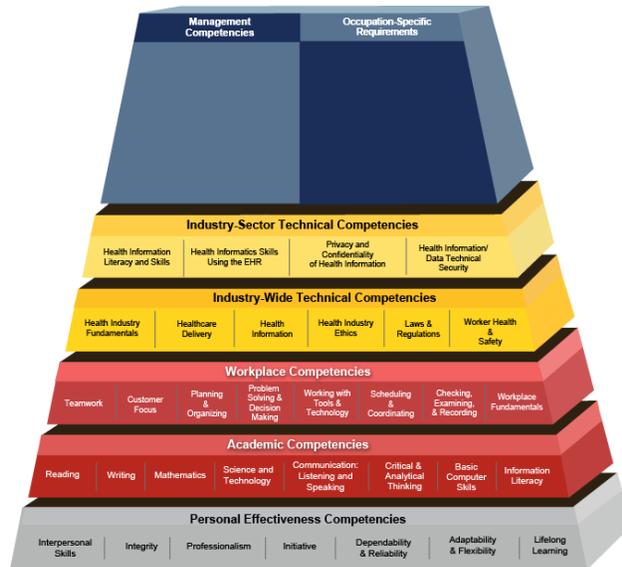
### **Program Innovation**

MUOhio’s new HIT program provides for multiple points of entry—new students, currently enrolled students, and students with Associate Degrees who wish to acquire a Bachelor’s Degree. For example, CSTC, which has a proposed 2-year Associate Degree program in HIT pending approval by the Ohio Board of Regents, has already developed an articulation agreement with MUOhio. CSTC HIT graduates will be able to pursue an HIT Bachelor’s Completion Degree program at MUOhio, resulting in an additional stackable credential.

“The program in Health Information Technology (HIT) is a Bachelor’s Completion Degree that addresses the technology and processes used by healthcare providers and related organizations. The program includes instruction in the technology used to acquire and direct the flow of information between the clinical, administrative, and financial systems in the healthcare industry as well as general principles of information technology. Students who complete the program will obtain a strong background in technology including database, problem-solving, systems analysis, and project management skills as well as a foundation in the culture of the healthcare system. This program prepares students for jobs that integrate health care and

technology in the evolving U.S. healthcare system.” See the website for more information <http://www.regionals.muohio.edu/hit>.

### **Similarities to the Electronic Health Records (EHR) Competency Model**



As noted earlier, MUOhio did not use ETA’s Electronic Health Records (EHR) Competency Model as a conceptual framework in developing its HIT program. However, many of the competencies that are embedded in its program mirror those in the EHR model. In the tier by tier analysis that follows, those competencies that are emphasized in the MUOhio program are highlighted. This comparison serves as further validation of the model as well as the workforce need anticipated due to the widespread implementation of EHR.

**Tier 1, Personal Effectiveness Competencies:** The HIT program emphasizes three of ETA’s competencies: Interpersonal Skills, Adaptability & Flexibility, and Lifelong Learning.

**Tier 2, Academic Competencies:** The HIT program differs from ETA’s model in that it assumes that students enrolling in this program already have two of the identified competencies: Basic Computer Skills and Information Literacy. MUOhio emphasizes three other competencies: Science & Technology, Communication, Listening & Speaking, and Critical & Analytical Thinking.

**Tier 3, Workplace Competencies:** The HIT program emphasizes two of ETA’s competencies: Teamwork and Working with Tools and Technology. MUOhio fine tuned a third competency, Problem Solving & Decision Making, by emphasizing the first factor. Ms. Evans notes that “HIT professionals at this level are valued for the recommendations they provide to those in decision making positions.”

**Tier 4, Industry-Wide Technical Competencies:** The HIT program emphasizes two of ETA’s competencies: Health Information and Health Industry Ethics.

**Tier 5, Industry-Sector Technical Competencies:** The HIT program emphasizes two of ETA’s competencies: Privacy and Confidentiality of Health Information and Health Information Data Technical Security.

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## Conclusion

“We expect great things to come from this program,” says Ms. Evans. “This is about offering opportunities for training in occupations for which there is a real need. This industry is so new. Employers – including private practitioners, hospitals, insurance companies, epidemiologists, educators, software developers-- need people who are trained and they have jobs for them. This is a big industry and a big opportunity.”

### **Related Links**

Health Information Management Society  
[www.himss.org](http://www.himss.org)

Program Website  
<http://www.regionals.muohio.edu/hit/>

Program Curriculum  
<http://www.regionals.muohio.edu/hit/documents/HIT2011-Curriculum-Requirements-12-5-2012.pdf>

Health Careers Collaborative of Greater Cincinnati  
[www.hccgc.org](http://www.hccgc.org)

**TRAINING AND EMPLOYMENT NOTICE NO. 14-11:** U.S. Department of Health and Human Services and the U.S. Department of Labor, Employment and Training Administration (ETA) Efforts to Support the Implementation of Electronic Health Records (EHR).  
[http://wdr.doleta.gov/directives/corr\\_doc.cfm?DOCN=3094](http://wdr.doleta.gov/directives/corr_doc.cfm?DOCN=3094)