



# Wide River TEC EHR Curriculum Development Award: One-Page Project Summaries

This document was developed by CIMRO of Nebraska through funding from the United States Office of the National Coordinator, Department of Health and Human Services, grant number 90RC0018/01. Form No. 0160-0811



Regional Extension Center

Awardee of The Office of the National Coordinator for  
Health Information Technology

## Wide River TEC EHR Curriculum Development Award: One-Page Project Summary

Awardee name(s)	Siti Arshad-Snyder
Contact information	Siti Arshad-Snyder, Assistant Professor – Health Care Business Program Clarkson College 101 South 42nd St, Omaha, NE 68131 arshadsnydersiti@clarksoncollege.edu
Affiliated institution	Clarkson College
Proposal title	Incorporating EHR in Health Care Information Systems and Advanced Health Care Information Systems Courses
Summary of curriculum plan	Beginning in academic year 2011-2012, Clarkson College will offer two new courses: Health Care Information Systems Management (HM342) and Advanced Health Care Information Systems Management (HM443). These courses will incorporate an EHR component into its information systems management track of instruction.
Purpose	The HM342 course will connect basic management of information systems concepts used to manage systems hardware, software, network infrastructure, data storage, and system security to that of an EHR system. It will also look at what effects an EHR system might have on future healthcare delivery and how it might influence the day-to-day work of clinicians, managers and administrators. The HM443 course will examine current and emerging clinical information systems such as telemedicine, E-prescribing and computerized physician order entry (CPOE), or EMR, along with a review of EHR and its major components. The course will also expose students to electronic health record standards, interoperability issues, their roles in health information exchanges, and security issues from the management of information systems perspective.
Target audience	Students majoring in Health Care Business Management, and/or Health Information Management at Clarkson College
Topics	See purpose of course.
Course structure	Degree-leading programs; online
Number of students	HM342 will be rolled out in spring 2012, and HM443 will be offered in spring 2013

## Wide River TEC EHR Curriculum Development Award: One-Page Project Summary

Awardee name(s)	Michele A. Faulkner, PharmD Keith J. Christensen, PharmD Thomas L. Lenz, PharmD
Contact information	Michele A. Faulkner, PharmD Creighton University School of Pharmacy and Health Professions 2500 California Plaza, Omaha, NE 68116 402.280.3145 faulkner@creighton.edu
Affiliated institution	Creighton University School of Pharmacy
Proposal title	Development of an Interactive Electronic Health Record as a Training Tool for Pharmacy Students
Summary of curriculum plan	An electronic database of medical charts has been created for students to gather patient information and create a comprehensive plan of care for individual patients. However, an interactive component that would allow students to add notes about their care plan thereby providing them an opportunity to practice communication via a patient's medical record is currently unavailable. Additionally, the lack of an electronic submission form to add patients to the database means that the process must be completed by hand. We plan to create both of these components to simulate an EHR that is more consistent with what is being used in real-world practice settings, and to expose the students to a greater number of cases so they may engage in care plan development for several unique patients with complex medical histories. We expect this exercise to serve as preliminary training for students so they are prepared to utilize EHRs in the care of their patients upon graduation.
Purpose	The Pharmacotherapeutics course series integrates the pathophysiology of disease with the pharmacologic properties of medications to educate students. The EHR component allows the student to utilize real patient data to identify pertinent information and integrate the knowledge they have learned into a comprehensive care plan for a patient as they will as licensed professionals.
Target audience	Second and third-year Doctor of Pharmacy students
Topics covered	In depth instruction into the pharmacotherapeutic management of major medical diseases with incorporation of pathophysiologic, pharmacologic and pharmacokinetic principles in a comprehensive medication therapy management model.
Course structure	Pharmacotherapeutics is a three-semester course series that includes didactic lectures and weekly case-studies presentations for which the EHR is utilized. Both campus and web students are enrolled.
Number of students	Approximately 400 students will be enrolled in a section of Pharmacotherapeutics at any time.

## Wide River TEC EHR Curriculum Development Award: One-Page Project Summary

Awardee name(s)	Diane Hoffmann, MSN, RN, Health Occupations Division Chair
Contact information	Diane Hoffmann, MSN, RN, Health Occupations Division Chair Mid-Plains Community College 1101 Halligan Drive North Platte, NE 69101 308-535-3623 hoffmannd@mpcc.edu
Affiliated institution	Mid-Plains Community College
Proposal title	Healthcare Informatics Course
Summary of curriculum plan	Develop a 3-credit Healthcare Informatics course that will be taught online in fall 2011. Of the three credit hours, one credit (15 hours) will be allocated to teach the importance and significance of the electronic health record. This course is designed to award credit as an elective in a program or as continuing education. The student will demonstrate competence by completing discussion board questions and completing assigned case studies
Purpose	The course will discuss issues related to impact of health informatics and electronic health records on the healthcare system.
Target audience	The target audience will include nursing, dental, laboratory, diagnostic imaging, health information specialists, office personnel, or any healthcare provider who uses EHRs.
Topics	The course will cover the impact of informatics and EMRs on the healthcare system including quality control, use of electronic communication, health information systems used in clinical nursing, security and confidentiality, regulatory and accreditation issues, patient education, and the impact of telehealth.
Course structure	Online; degree leading
Number of students	We expect to have 25 students per course session.

## Wide River TEC EHR Curriculum Development Award: One-Page Project Summary

Awardee name(s)	Lisa Lechowicz
Contact information	Phone 402-951-4701 Email: LL@hdmcorp.com
Affiliated institution	Metropolitan Community College
Proposal title	EHR, Meaningful Use and YOU
Summary of curriculum plan	This 4-hour workshop is targeted to front line staff in physician offices, clinics and hospitals. The course content will include an overview of the Electronic Health Record initiatives underway nationally and specifically what is being done in Nebraska
Purpose	The Purpose of the Curriculum is to familiarize front line staff with EHRs, the pursuit of meaningful use and how each individual in health care is involved in this massive transformation to improve the quality of care in America.
Target audience	Office staff in physician offices
Topics covered	<p>Compare the EHR, EMR and PHR</p> <p>Describe the benefits of using the EHR</p> <p>Examine the requirements for achievement of “meaningful use”</p> <p>Explain how the Federal requirements are being implemented in Nebraska</p> <p>Define the stakeholders in the use of electronic health records</p> <p>Review the HIPAA requirements related to EHR privacy and security</p> <p>Prepare a “gap analysis”</p> <p>Identify your role in implementation and use of the EHR</p>
Course structure	The curriculum will be delivered as a Continuing Education course either through Metropolitan Community College’s Continuing Education Programs and/or as a webinar made available to the public through my Company, HDM Corp
Number of students	I expect 25 students to take the course by September 2011 and 100 students by December 2011

## Wide River TEC EHR Curriculum Development Award Summary

Awardee Name	James C McClay, MD
Contact Information	981150 Nebraska Medical Center Omaha, NE 68198-1150 jmcclay@unmc.edu
Affiliated institution	University of Nebraska Medical Center
Proposal title	Inclusion of a section on the Meaningful Use of Electronic Health Record Systems in <i>Introduction to Biomedical Informatics</i> for the University of Nebraska Biomedical Informatics Curriculum.
Summary of curriculum plan	Biol 810: Introduction to Biomedical Informatics (BMI) is a 16 week, 3 credit course that covers Biomedical Informatics from biologic sciences to public health informatics as a graduate level course. Coverage of the Electronic Health Record and Meaningful Use will be woven into weeks 5, 6, and 8.
Purpose	The Introduction to Biomedical Informatics course (Biol 810) is designed to serve as a core course for the joint Bioinformatics and Medical Informatics graduate curriculum at the University of Nebraska leading to a MS or Ph.D. The EHR component of the course is designed to introduce BMI students to issues related to the Meaningful Use of Health Information Technology focusing on the EHR as a mechanism to translate clinical knowledge into safe and efficient practice.
Target audience	Graduate students in Bioinformatics, medical informatics and related fields enrolled at The University of Nebraska Medical Center or The University of Nebraska Omaha. Course is open to students in MIS, MPH, MBA and related curriculums
Topics	The Introduction to BMI course covers Informatics issues from computer science to public health, the Meaningful Use of EHR component will cover: Basics of Clinical Medicine and Medical Records Introduction to Electronic Health Records Background and history leading to drafting of Meaningful Use requirements Meaningful Use requirements for EHR CPOE and Clinical Decision Support Health Information Exchange and related informatics standards Security and Privacy issues Basic issues in system selection and implementation
Course structure	Degree Leading Introductory Biomedical Informatics Course for University of Nebraska BMI degree shared with other related curriculums. The course is a semester course taught using a mix of face-to-face and online lectures with related readings, interactive discussion board and research paper. The course will be built and administered through the UNMC Blackboard interactive education system.
Number of students	The first cohort of students will finish the course at the beginning of December 2011 with enrollment expected to be 8-10 students.

## Wide River TEC EHR Curriculum Development Award Summary

Readings or resources	<p>Textbook: Amatayakul, MK. Electronic Health Records: A practical guide for professionals and organizations, 4th ed. 2009.</p> <p>Course Textbook: Shortliffe, Cimino; Biomedical Informatics: Computer Applications in Health Care and Biomedicine, 3rd ed. 2006, Chapter 7: Standards in Biomedical Informatics, Chapter 12: Electronic Health Records Systems, Chapter 20: Clinical Decision Support Systems.</p> <p>Seminal readings from related literature including: Yasnoff, W. A., Humphreys, B. L., Overhage, J. M., Detmer, D. E., Brennan, P. F., Morris, R. W., Middleton, B., et al., A consensus action agenda for achieving the national health information infrastructure, J Am Med Inform Assoc, 2004, 11(4):332-338. Blumenthal, D. &amp; Tavenner, M. (2010). The "meaningful Use" regulation for electronic health records. The New England Journal of Medicine, 363, 501-504</p> <p>Meaningful Use Regulations published by the Office of the National Coordinator of HIT.</p>
-----------------------	--

## Wide River TEC EHR Curriculum Development Award: One-Page Project Summary

Awardee name(s)	Connie Miller, PhD, RN and Jami Monico, MS, Ed
Contact information	Connie Miller, PhD, RN 985330 Nebraska Medical Center, Omaha, NE 68198, 402-559-2208; clmiller@unmc.edu
Affiliated institution	University of Nebraska Medical Center College of Nursing
Proposal title	Integrating EHRs into a Nursing Curriculum
Summary of curriculum plan	<p>We will offer online modules which will be available spring 2011: (4-6 instructional hours total)</p> <ol style="list-style-type: none"> <li>1. EHR basics – advantages of electronic records, commonalities, and impact on quality and safety (will also be adapted for student instruction).</li> <li>2. Integrating EHRs into nursing courses at all levels.</li> <li>3. Incorporating EHRs into high-fidelity simulations (eliminate those paper charts!)</li> <li>4. Utilizing EHR data for trend analysis</li> </ol> <p>At the completion of the self-paced online modules, a 2-hour hands-on training session using the EHR will take place.</p>
Purpose	To prepare faculty to describe the impact of EHRs on patient safety and quality healthcare; discuss the commonalities among various EHR systems, and discover how to incorporate use of EHRs into high-fidelity simulations
Target audience	Nursing faculty at UNMC
Topics covered	See above description of summary of curriculum plan for content.
Course structure	Online modules and a hands-on training session.
Number of students	We anticipate that over 60 UNMC College of Nursing instructors and faculty will have completed the online tutorial and submitted the survey by December 2011.

## Wide River TEC EHR Curriculum Development Award: One-Page Project Summary

Awardee name(s)	Michelle Rule
Contact information	mrule@mccneb.edu or 402-317-3018
Affiliated institution	Metropolitan Community College
Proposal title	HIT Pro™ Competency Exam Prep Course
Summary of curriculum plan	<p>This course will prepare individuals for the national HIT Pro™ competency exam developed by AHIMA and NOVA (Northern Virginia Community College) which is expected to be available mid-2011. The content of the exam will be based on the HIT curriculum that was created through ONC funding grants and disseminated to community colleges throughout the nation. Metropolitan Community College currently offers this curriculum in its HIT program</p> <p>Individuals who enroll in this class will be provided with information about the process of registering for and taking the competency exam.</p>
Purpose	To prepare individuals for the national HIT Pro™ competency exam
Target audience	Health information technology students and current HIT professionals.
Topics covered	<ul style="list-style-type: none"> <li>▪ Health Care in the United States</li> <li>▪ The Evolution of HIT in the U.S.</li> <li>▪ Overview of Health Management Information Systems</li> <li>▪ Meaningful Use</li> <li>▪ Security in the HIT Environment</li> <li>▪ Networking and Health Information Exchange</li> <li>▪ Health Workflow Process Analysis and Redesign</li> <li>▪ Quality Management and Reporting</li> <li>▪ Usability and Human Factors</li> <li>▪ Professionalism in the Health Care Environment</li> <li>▪ Planning, Management and Leadership for Health IT</li> <li>▪ Training EHR Users</li> </ul>
Course structure	This noncredit, self-paced review course will be delivered online. The course will be comprised of at least 12 learning modules. Learners can expect to spend an average of three hours on each module, for a total time invested of approximately 36 hours. Each module will contain true/false and multiple choice assessment quizzes.
Number of students	The candidate guide and HIT Pro™ exam blueprints were released in May of 2011. The launch date for the review course is September 2011. By December 2011, it is expected that about 40 individuals will be either in the process of finishing the course or will have completed it and we expect 80 to complete the course by September 2012. These numbers were arrived at based on the number of students currently enrolled in MCC's HIT training program. All students who complete the HIT program of study will

## Wide River TEC EHR Curriculum Development Award: One-Page Project Summary

	<p>be urged to enroll in this review course prior to sitting for the national competency exam. It should be noted that anyone may sign up for the review class; it will not be limited to MCC health IT students.</p>
--	---