Wide River Technology Extension Center Health Information Technology Workforce Development Initiative

Final Project Report

Prepared by the University of Nebraska Public Policy Center

August 2012
Executive Summary

The Health Information Technology Workforce Development Initiative was a component of the Wide River Technology Extension Center established in Nebraska through funding from the American Recovery and Reinvestment Act of 2009. A requirement of the funding was that grantees “promote integration of health IT into the initial and ongoing training of health professionals and supporting staff.”\(^1\) The Wide River Technology Extension Center contracted with the University of Nebraska Public Policy Center to lead the workforce development program (April 2010 through August 2012).

Nebraska established three goals for the Health IT Workforce Development Initiative: 1) enhance students’ exposure to EHRs through coursework; 2) collaborate with related initiatives to share ideas, maintain open lines of communication, and avoid duplication of services; and 3) facilitate shared learning through a regional conference and an information-rich website for educators and others interested in HIT workforce development. The major activities and results of the Initiative were:

- **Curriculum Development Awards** were made to 17 instructors/post-secondary institutions to incorporate meaningful use of electronic health records (EHRs) into curricula. Awards were made for instruction in the fields of nursing, pharmacy, occupational therapy, physical therapy, and health information management services programs. As of June 2012, over 700 Nebraska students received instruction in EHRs and meaningful use as a result of the curriculum development awards. It is anticipated that by December 2012, well over 1,700 will have received training supported by this Initiative.

- **A 16 member Advisory Workgroup** was established to provide oversight and coordination with related activities. The Advisory Workgroup met approximately every six months over the course of the Initiative. Several Advisory Workgroup members served on the Curriculum Award subcommittee. Between meetings, all Advisory Workgroup members were apprised of activities through email communications.

- **Staff** coordinated with related programs and presented information at state-wide conferences. The Center worked closely with local agencies, professional organizations, and post-secondary institutions. One particularly important relationship was with Metropolitan Community College’s Health Information

\(^1\) Office of the National Coordinator for Health Information Technology. (2009). Section I of the Funding Opportunity Announcement and Grant Application Instructions.
Technology program. This program is a member of an ONC-funded Community College Consortia for educating health IT professionals. Center staff presented at four state-wide events to promote the Initiative.

- A regional EHR education conference was convened. *The Electronic Health Record Education: Building a Tech-Savvy Workforce* conference was held in Lincoln, NE on October 12, 2011. The conference featured nationally-known speakers, along with Nebraska’s EHR Curriculum Development Awardees. 80 individuals participated in the event. Information about the Initiative has been integrated into Wide River’s website (www.widerivertec.org) and the Public Policy Center website (http://ppc.unl.edu/project/WideRiverTechnologyExtensionCenterWorkforceDevelopment).
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Background

Health Information Technology (IT) workforce development has become an increasingly important issue as our nation adopts electronic health records (EHRs). Health care workers will be on the front lines in assuring that EHRs are effectively implemented and used. A 2008 survey suggests that one of the most important skills new nurses need is the ability to use technology. Yet, the 2010 Forum on the Future of Nursing stated that one of the biggest barriers to adding EHR education to nursing curricula is lack of familiarity by educators.

The American Recovery and Reinvestment Act (2009) established funding for Health Information Technology Extension Programs, who would “help providers in their geographic service areas select, successfully implement, and meaningfully use certified EHR technology to improve the quality and value of health care.” The scope of services was to include, among other responsibilities, the “integration of health IT into the initial and ongoing training of health professionals and supporting staff.”

Wide River Technology Extension Center was awarded funding through the federal program to serve Nebraska. Wide River’s workforce development activities were designed to educate Nebraska’s health professionals, staff and student on the use of EHRs in accordance with the Office of the National Coordinator for Health Information Technology’s (ONC) meaningful use standards. The Initiative was designed as a companion program to supplement, but not duplicate, other workforce development programs already established by the ONC. Beginning in April 2010, The Workforce Development Initiative was funded for two years (April 2010 through August 2012) and coordinated by the University of Nebraska Public Policy Center (Center).

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4 Office of the National Coordinator for Health Information Technology. (2009). Section I of the Funding Opportunity Announcement and Grant Application Instructions.
5 Office of the National Coordinator for Health Information Technology. (2009). Section I of the Funding Opportunity Announcement and Grant Application Instructions.
6 Federal Award 90RC0018/01 (CFDA 93.718) through the American Recovery and Reinvestment Act of 2009, Title XIII - Health Information Technology, Subtitle B—Incentives for the Use of Health Information Technology, Section 3012, Health Information Technology Implementation Assistance Health Information Technology Extension Program: Regional Centers Cooperative Agreement Program administered by the Office of the National Coordinator for Health Information Technology (US Department of Health and Human Services).
Goals

The Initiative established three goals to achieve health IT workforce development:

- Goal 1: Enhance students’ exposure to EHRs through coursework.
- Goal 2: Collaborate with related initiatives to share ideas, maintain open lines of communication, and avoid duplication of services.
- Goal 3: Facilitate shared learning through a regional conference and an information-rich website for educators and others interested in HIT workforce development.

Results and Activities

**GOAL 1: ENHANCE STUDENTS’ EXPOSURE TO EHRs THROUGH COURSEWORK**

The EHR Curriculum Development Awards

The purpose of the EHR Curriculum Development Awards was to encourage educators interested in health IT and to develop new EHR-related coursework in Nebraska for health professionals, students and support staff. With the federal incentives/penalties pushing healthcare providers to implement EHRs, many institutions understood that their courses needed to be redesigned to incorporate EHR practices, but organizing curriculum changes can be expensive and time consuming. In a sense, the EHR Award program served as a grassroots effort to encourage individual educators to integrate EHR education into new or existing courses without the need to formally redesign an entire department curriculum.

Educators’ affiliated with accredited post-secondary institutions in Nebraska were invited to apply for up to $3,000 to design an EHR-related curriculum. The term “curriculum” was defined broadly to allow educators to structure and deliver the new EHR-related course material in a manner appropriate for their target audience in their local community. Curriculums could take a variety of forms such as: a set of training modules, a workshop, a continuing education program or a full length course. Courses could be offered to traditional or non-traditional students, or employed professionals and/or staff.

Applications for the awards were available online on the curriculum funding page of the Wide River TEC website. There were two rounds that each lasted about 12 weeks (Table 1). Proposals for Round 1 were available from November 9, 2010 through January 25, 2011. Proposals for Round 2 were available from February 25 through May 2, 2011.
### Table 1. Timetable for EHR Curriculum Development Award Process

<table>
<thead>
<tr>
<th>Round</th>
<th>Applications Available Online</th>
<th>Application Review Committee Meetings</th>
<th>Awards Announced and Awardees Notified</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>November 9, 2010 through January 24, 2011</td>
<td>February 2011</td>
<td>February 25, 2011 8 awards</td>
</tr>
<tr>
<td>2</td>
<td>February 25, 2011 through May 2, 2011</td>
<td>May 2011</td>
<td>June 1, 2011 10 awards</td>
</tr>
</tbody>
</table>

A short application was designed to make the process quick, easy, and unintimidating for qualified applicants (Appendix A: Instructions and application for the EHR award). To apply, applicants were asked to submit four documents: a) a short application form, b) a vita, c) a proposal of up to 500 words describing the plan for an EHR-related curriculum, and d) a letter of endorsement from a dean or director at the applicant’s affiliated post-secondary institution. The letter of endorsement served as a reference for the applicant’s ability to design and deliver an EHR-related curriculum. Educators who received an award during the first round were permitted to apply for another award during the second round. Applicants were encouraged to use the curricula developed through the ONC’s Curriculum Development Center program.

#### Expectations of awardees

Awardees were expected to submit the following items according to a scheduled timeline: a) a One-Page Project Summary which would be posted on the Wide River TEC website; b) a more detailed EHR Curriculum Plan that would include a course description, syllabus, goals and objectives, workload expectations, and assessment measures; c) Progress Reports which would include information about delivery of content and number of students who completed coursework; and d) a Conference Presentation for the EHR Education: Building a Tech-Savvy Workforce conference. In the application materials, applicants were informed that awardees would receive half the award money when the awards were announced and the remaining half when the project was completed.
Promoting the award process and initiative

To identify and notify potential applicants about the awards, the Center contacted the deans and directors of relevant programs at post-secondary institutions in Nebraska. In addition, agencies, hospitals, and professional organizations were contacted. A number of potential applicants were identified through course listings on academic websites and by personal recommendations from educators, healthcare providers, academic institutions, or other interested parties. When possible, potential applicants were contacted directly via email and phone. In addition, an all-media press release was delivered throughout the state and flyers on the initiative were made available at local HIT related conferences.

Both Wide River TEC and the Center included information about the awards on their websites. Wide River TEC designed a Curriculum Funding tab for all the WRWD Initiative materials which were updated as needed throughout the grant period. The Curriculum Funding Tab opened with a general announcement about the awards with links to documents including: Instructions and Application; Reviewer’s Evaluation Forms; Frequently Asked Questions (Appendix B: FAQ for EHR award applicants); and eventually summaries of awarded proposals. All documents are available in the Appendix.

Review process for the awards

The review committee was recruited from the Advisory Workgroup to review applications for the awards. The five review committee members rated each application using a standardized review form prior to the review committee meeting (Appendix C: Review evaluation form for the EHR awards). The committee then met, discussed each application, and when necessary developed additional questions for the applicants to answer before deciding on the final slate. The slate was sent to the Advisory Workgroup for approval and shared with WRTEC’s Advisory Council before notifying the awardees. After the awardees were contacted, a public announcement was made. Between the two rounds, 18 awards were approved. Due to a change in employment, one awardee declined the award before the public announcement, therefore 17 awards were announced. In total, $50,800 in awards was made: 16 awards for $3,000, and 1 award for $2,800.

Summary of awards

- **Disciplines** – nursing, bioinformatics, health information management, informatics, sonography, pharmacy, physical therapy, occupational therapy, and long term care.
- **Locations** – Omaha, Lincoln, North Platte, Hastings, 5 campuses for UNMC-College of Nursing (Lincoln, Omaha, Kearney, Scottsbluff, Norfolk,).
- **Post-secondary institutions** – University of Nebraska Medical Center, Clarkson College, Creighton University, Community Colleges (Metropolitan Community
College in Omaha, Central Community College in Hastings, and Mid-Plains Community College in North Platte); hospital programs; and a long term care program.

- **Range of academic degrees among awardees** - BS, MS, Pharm D, MD, and PhDs.
- **Courses aimed at a range of healthcare workers**. The courses included degree-leading graduate courses to online workshops for office personnel.
- **Structure of course work** – online, in class, combination of synchronous and asynchronous courses, workshops, and modules. Some redesigned a number of courses in a department and many added new course material to required courses.

**Impact of the awards**

The awards successfully spurred development of EHR curricula throughout Nebraska’s post-secondary institutions, and as of June 2012 have resulted in over 700 Nebraska students receiving instruction in EHRs and meaningful use. It is anticipated that by December 2012, well over 1700 will have received training supported by this Initiative (Appendix D: Students trained by curriculum development award courses).

Beyond the individual student impact, the awards had important impacts on a number of institutions:

- **UNMC College of Nursing** now has an EHR component in their required courses for both undergraduates (Lincoln and Kearney) and for graduate students. They also have a new course that is available for faculty on all 5 campuses (Lincoln, Omaha, Kearney, Scottsbluff and Norfolk) on how to integrate EHRs into their courses. Prior to receiving the three awards, the College of Nursing did not have a systematic EHR Education component in their courses. A year after the awards were announced, the University of Nebraska Medical Center College of Nursing (UNMC-CON) has had 253 students and faculty complete EHR education modules which were created as a result of these awards.

- **Creighton University’s School of Pharmacy** revised their current EHR to include interactive progress notes and updates which allow faculty to upload de-identified patient data for the student EMR. This is a more comprehensive student EHR that will be used by all pharmacy students beginning in fall 2012.

- **Creighton University’s Physical Therapy and Occupational Therapy** department developed several components for their EHR education plan. There is a new EHR component in four separate courses required for all 2nd and 3rd year students. The department held a Grand Rounds presentation on EHR education. For a limited time, students were able to access a website and voluntarily complete a 4-module EHR course for an EHR certificate. By June 2012, 63 students had received this certificate and there are plans to offer this option again. Creighton
may offer these modules as a continuing education program for OT and PT practitioners.

- University of Nebraska-Omaha is starting a biomedical informatics program with an EHR component in the introductory course. The course is scheduled to begin fall 2012 for graduate students in health fields.

- Bryan Lincoln General Hospital College of Health Sciences purchased new EHR software and coursework which will first be used in fall 2012 for the patient simulation lab in nursing. Sonography students will be introduced to new EHR materials in the courses for the picture archiving and communication system (PACS). All students in sonography and nursing will now complete EHR education coursework during their core studies.

- Nebraska Health Care Learning Center convened and filmed a full day workshop at Nebraska Educational Telecommunications studio (Lincoln) for long-term care providers throughout the state in February 2012. Plans are being made to use the filmed sessions as training modules for continuing education and for their website. The American Health Care Association, the national organization for long-term care providers, has expressed interest in viewing these modules.

- Clarkson College developed two new required courses for the Health Care Business Management (HCBM) program and the Health Care Information Management (HIM) program to expose students to EHRs from the information systems management perspective. An EHR component with a case study was incorporated into the Project Design and Management course for both majors. An existing online EHR course that was formerly only open to health information management students was revised as a 2 credit hands-on course open to students in all healthcare fields (nursing, radiology technology, medical imagining, HCBM, HIM, physical therapy assistants).

- Central Community College redesigned four Health Information Management courses. Each course now includes a new hands-on EHR project. These courses are targeted to students in HIM, nursing, IT and related fields.

- Mid-Plains Community College developed a new semester long introduction to health IT course. In this college in an underserved rural area, one of the aims of this course is to encourage local students to consider a career in health IT.

- An online self-paced review course for the national HIT Credentialing Exam is targeted for the attendees of the community college consortia HIT specialist courses and is open to anyone. This course is offered on the QUIA.com website at [http://www.quia.com/profiles/healthit](http://www.quia.com/profiles/healthit).
Metropolitan Community College designed a new course, *Introduction to EHRs*, as a half-day workshop for nursing students. It will be offered each quarter.

**Feedback from awardees**

Awardees were interviewed by phone in February 2012 after courses were underway. The following is a sample from the interviews. Results of the interviews suggest that the awards brought focus to the need for EHR coursework and that without the awards Nebraska’s post-secondary institutions would not have reacted as rapidly as they did.

**Question 1.** Would you have developed and provided the EHR coursework in 2011 or 2012 if you had not received the award?

- No. The award forced me to become more aware of EHRs and make sure it is in the courses for my students. I had not thought about including EHR material before.
- We included examples of EHRs [in courses] prior to award, but the award pushed us. We’re in the midst of curriculum changes now. Money stimulates. This award supported staff to develop the curriculum.
- We offered an EHR course, but it was too technical and needed to be tweaked. We also opened it to other departments – PT, radiology, nursing and others. The other disciplines don’t get this information otherwise.
- [The award] provided more insight [about EHRs] and more hands-on experience for students [with better equipment].
- It was on my list. Money buys focus.
- We would have done something, [but not as extensive] without support. [The department] had talked about it, but not planned it.
- Probably not. I had too many other things going.
- No. The HIM program is so busy...EHR was not a priority. [The award] freed up some time [for me] over the summer and it became a priority.
- No, probably not. Informatics was put in a course, but we were just going to add a few articles. The money allowed us to build a comprehensive project, develop case histories, etc.
- Without funds, we might have done a smaller course. We recognized the need, but there was no action. The award drove making it happen.
- We wanted to implement EHRs [in a new clinic] and learn more about it. [Preparing the EHR course materials for our students] helped us learn more about EHRs, ask better questions and choose a better clinic product.

**Question 2.** Had your department or college had talk about or actually planned to provide EHR education courses prior to the awards

- My department had, but I had not.
- It was on the back burner and would have stayed there because they didn’t have funding to change the curriculum.
• [The award] was used to make the current student EHR much better for students and for faculty. The new component has an interactive function, which allows students to write progress notes and also allows faculty to upload de-identified case studies directly to the student EHR.

• [EHRs] were not being taught. The chair asked if someone would present on [EHR education] earlier, but no one jumped at the idea. So it was identified as a need and maybe someone might have prepared an hour lecture on it. Getting the grant was the motivator, not the money. The grant pulled the team together and allowed us to dedicate time for this. It got us in one room and kept us working on it.

Question 3. Do you think your award has encouraged other instructors or departments to develop EHR-related courses, modules or workshops?

• The instructor who teaches it wants to improve and develop the curriculum further.
• Yes. A seminar course was developed [by another faculty member].
• Once changes are implemented in one course, there is a ripple effect ...
• Another faculty colleague is planning to take the RHIT exam.

Question 4. Other thoughts?

• It’s important to offer an introduction to informatics course in a rural community college to spark interest in the field. We can’t offer a whole curriculum in health information management, but we can get them started and then help our students finish their degree at another school. We need to grow our own and train people who live in our very rural areas since few people move to these areas.
• Students had some information about EHRs, but no practice with it.
• It seems like common sense to teach this, but we learned there is a lot you should know. We hope we are doing a better job preparing our students and practitioners especially regarding how EHRs are influencing clinical reasoning and their practice.
• Now, all OT and PT students are exposed to content in 2nd and 3rd years in four separate courses. This is a change in the curriculum content that’s permanent.
• We taped the full workshop and plan to add the education modules to our website.

GOAL 2: COLLABORATE WITH RELATED INITIATIVES TO SHARE IDEAS, MAINTAIN OPEN LINES OF COMMUNICATION, AND AVOID DUPLICATION OF SERVICES

The Advisory Workgroup

An Advisory Workgroup was chartered early in the grant to represent Nebraska’s post-secondary institutions active in health professions education, healthcare providers, and stakeholders from related programs, organizations and agencies. The workgroup consisted of 16 individuals including directors from the Nebraska Community College Association, the
Adult Education Department of the Nebraska Department of Education, the Nebraska Department of Labor, representatives from the Coordinating Commission for Postsecondary Education, the Nebraska Hospital Association, the University of Nebraska Medical Center, and the Dean and the HIT Health Consortia Director from Metropolitan Community College. The workgroup’s mission was to strengthen Nebraska’s workforce in the meaningful use of EHRs. Members actively discussed project goals, activities, and progress, and disseminated information about the initiative throughout the state.

The workgroup met several times and maintained communications via email and phone. The full workgroup convened prior to the call for applications for the EHR Curriculum Development Awards (Sept 2010), and prior to the Workforce Development Conference (Sept 2011). Members of the workgroup were recruited to serve on two review committees for the EHR Curriculum Development Awards in February 2011 and May 2011.

Coordination with Related Programs and Presentations

In addition to the coordination through the Advisory Workgroup, throughout the grant period PPC staff worked closely with local agencies, professional organizations, and post-secondary institutions. Through these contacts, Center staff promoted the Initiative and coordinate with other efforts. A number of organizations featured information about the Initiative in their newsletters. Special efforts were made to ensure that the project was directing stakeholders to other federally-funded activities relating to EHRs and workforce development. For example, we worked closely with Metropolitan Community College’s (MCC) Health Information Technology program throughout the project. MCC is a member of one of five national ONC-funded Community College Consortia to educate health IT professionals. MCC was represented on the Advisory Workgroup and Elizabeth Willborn, manager of the Initiative for the Center, served on an MCC committee. MCC and Center staff jointly promoted each other’s programs whenever possible and even co-presented at a state-wide conference. Further Center staff promoted materials from ONC’s Curriculum Development Centers Program. Finally, Center personnel gave presentations at state-wide conferences to promote the Initiative in December 2010, March 2011, and two in October 2011.
**GOAL 3: FACILITATE SHARED LEARNING THROUGH A REGIONAL CONFERENCE AND AN INFORMATION-RICH WEBSITE FOR EDUCATORS AND OTHERS INTERESTED IN HIT WORKFORCE DEVELOPMENT**

### EHR Education Conference

A regional conference, *EHR Education: Building a Tech-Savvy Workforce*, was held on October 12, 2011 at the Embassy Suites Hotel in Lincoln NE. The EHR education conference provided an opportunity for the EHR Curriculum Development awardees to network and share ideas about their newly developed EHR courses, and to extend learning to other stakeholders interested in EHR curriculum development. The conference included two nationally-known keynote speakers: C.T. Lin, MD and Chief Medical Information Officer at University of Colorado Hospital spoke on EHR implementation challenges and physician adoption, and Meredith Nahm, PhD, from Duke University spoke about the Curriculum Component Blueprints for the ONC’s Curriculum Development Center Program. Each of the Nebraska EHR Curriculum Development Awardees made presentations on their EHR courses, which allowed educators who are planning to incorporate health information technology, EHR information, and meaningful use standards into new or existing courses a chance to exchange ideas. Awardees discussed ways to train all levels of providers and staff across a variety of disciplines. Over 80 educators and providers attended from all over Nebraska and a few surrounding states.

Conference attendees were provided evaluations asking whether, each of the speakers was knowledgeable, organized and effective. The Likert-scaled responses (1 - strongly disagree to 5 - strongly agree) were overwhelmingly positive ($n = 50$). The lowest average score for a single presentation was a 4 and one of the featured speakers, Dr. CT Lin received a score of 5 on all the evaluations.

### Website

Websites offer an excellent way of communicating information to multiple stakeholders. A section of the Wide River website ([http://www.widerivertec.org/](http://www.widerivertec.org/)) was reserved for information about the Initiative. Additionally, the Public Policy Center established a site ([http://ppc.unl.edu/project/WideRiverTechnologyExtensionCenterWorkforceDevelopment](http://ppc.unl.edu/project/WideRiverTechnologyExtensionCenterWorkforceDevelopment)) linked to the Wide River website that also had information about the initiative. The sites were sources of information about the Curriculum Development awards and guidelines and conference announcements/reservations. The sites also link to related information sources, abstracts of the Curriculum Development Awards, and materials from the conference.
Approvals for the Final Report of the Wide River TEC Health IT Workforce Development Initiative

Prepared By

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Primary Investigator and Executive Consultant for the Wide River TEC Health IT Workforce Development Initiative

This document requires the following approvals

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Primary Investigator and Executive Consultant for the Wide River TEC Health IT Workforce Development Initiative

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Tina Georgy, RN, MS
CEO, Wide River Technology Extension Center

Approval Date ___________________________
Appendix A: Instructions and application for the EHR award
Wide River TEC Workforce Development Initiative
EHR Curriculum Development Awards – Round 2
Instructions and Application

Thanks for your interest in developing or integrating EHRs into your curriculum!

What is the purpose of the awards?
Nebraska educators may apply for up to $3000 to develop and teach an EHR-related curriculum. The purpose of the awards is to better prepare Nebraska’s healthcare workforce to use electronic health records (EHRs) or electronic medical records (EMRs) in accordance with Meaningful Use standards across a variety of settings (hospitals, doctor’s offices, nursing homes, pharmacies, etc.).

Who is eligible to apply?
These awards are open to educators affiliated with accredited post-secondary schools in Nebraska.

What is needed for the letter of endorsement from a post-secondary institution?
Applicants are required to include a letter of endorsement from a Dean or Department Chair of an affiliated post-secondary institution. The letter will serve as a reference for the applicant and the applicant’s ability to develop an EHR-related curriculum and deliver EHR training according to award instructions. Please don’t hesitate to contact Elizabeth Willborn if you have questions about this.

What form should EHR training be?
The EHR Curriculum Development awards are designed to fund the development of a variety of courses. The term “curriculum development” is meant to be interpreted broadly. For example, instructors may develop a new workshop or a training module or several modules. Instructors may adapt an existing course to incorporate a unit on EMRs, or may integrate electronic practices throughout a course. An instructor may even propose creating a new course. The courses may be delivered as part of an ongoing, degree-leading program, may be offered as a certificated workshop or training, may be professional development or on the job training opportunities, or through other channels. The idea is to support Nebraska’s healthcare workforce use of EHRs according to the “Meaningful Use” definition and standards set by the Office of the National Coordinator for Health Information Technology (ONC). For more information, see the Meaningful Use tab on the Wide River TEC web site.

Can you provide examples of content for training modules?
The curriculum you develop should be based on the needs of your intended audience. General topics that would be appropriate would include, but not be limited to: using electronic health records, ePrescribing, outcomes of use of EMRs/EHRs, clinical workflow in the electronic world, privacy and security, coding and billing, vendor relationship and evaluation, life cycles of EHR and software, role-based access of information. You may propose topics beyond those listed here. In your application you will be expected to provide specific information about the topic/s you propose.

In April 2010, the ONC awarded $10 million in grants to five domestic institutions of higher education to develop curriculum and instructional materials to enhance workforce training programs primarily at the community college level. We encourage, but don’t require, applicants to use the recently released Curriculum Component Blueprints which were developed by this federal program specifically for training the workforce to use EHRs. To view the curriculum blueprints, click here.

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. 0057-1110
Who is the target audience for the new EHR training?
Courses should be targeted to individuals who work in any of the following areas: primary care providers (physicians, nurse practitioners and physician assistants), allied health practitioners, pharmacy, Health Information Management Service (HIMS); Information Technology; and support staff.

Where is the funding coming from to fund these awards?
Nebraska’s Wide River Technology Extension Center received a federal HITECH Act (American Recovery and Reinvestment Act of 2009) grant to assist Nebraska providers in adopting electronic health records (EHRs) and achieve Meaningful Use of EHRs. Part the grant Wide River TEC received is meant for workforce development to help Nebraska’s health workforce use EHRs in accordance with the federal standards for Meaningful Use. The EHRs Curriculum Development Award is part of the Workforce Development Initiative by Wide River TEC.

What are the expectations of award winners?
Instructor(s) selected to receive an award will provide Wide River TEC with:

- **EHR Curriculum Plan** (course description, syllabus, goals and objectives for students, workload expectations and assessment measures) are due within 3 months of receiving the initial award.
- **One-Page Project Summary** of the EHR Curriculum Plan which will be posted on the Wide River TEC website. This is due within 3 months of receiving the initial award.
- **EHR Workforce Development Conference.** Plans are underway for a conference in Lincoln in the fall of 2011. Award winners will be invited to participate and may be selected to create a short (15 minute) presentation about their work. All award winners are asked to submit plans for a brief conference presentation by Sept 16, 2011.
- **Progress Reports.** Award winners will be asked to complete a short progress report for Wide River TEC 60 days after receiving the award and a final report by Dec. 16, 2011.

More about the awards:
- Approximately 20 awards of up to $3,000 will be presented to the individual who is the lead applicant on the proposal (not the post-secondary institution) in 2011. Eight awards were presented after Round 1 and 12 will be available for Round 2.
- Award winners will receive 50 percent of the award money when the awards are announced and 50 percent when the EHR Curriculum Plan and One-Page Project Summary are submitted and approved.

Who do I contact if I have questions?
- Contact Elizabeth Willborn at ewillborn@nebraska.edu. Ms. Willborn works at the University of Nebraska Public Policy Center and is the Wide River TEC Workforce Development Initiative Coordinator.
- Check the Curriculum Funding tab at [www.widerivertec.org](http://www.widerivertec.org) for details and the FAQ page for updates on the awards.

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**Checklist for applicants:**

1. For complete information about these awards, please check the Curriculum Funding tab on the Wide River TEC website ([www.widerivertec.org](http://www.widerivertec.org)). This is where you’ll find the instructions, application and the form our reviewers will use to evaluate the proposals. Look for updates on the FAQ page. Please read these documents carefully before submitting your proposal.
2. Complete the application form.
3. Attach a letter of endorsement from the dean or department chair from an affiliated post-secondary institution.
4. Attach applicant(s) resume or vita.
5. Attach a Word document (up to 2 pages) describing your proposed EHR-related curriculum plan in approximately 500 words.
6. Submit all materials to ewillborn@nebraska.edu or EHRawards@gmail.com by midnight April 25, 2011. Please include “EHR Curriculum Development Application-Round 2” in the subject line. If you do not receive confirmation that your proposal was received within 3 days, please contact Elizabeth Willborn.
Application for the Wide River TEC EHR Curriculum Development Awards – Round 2

Note: Read the Instructions and Application, the Reviewer’s Evaluation Form and the EHR Awards FAQ page for detailed instructions, expectations and information on how to submit this application. Again, thanks for your interest!

### Section I: Contact Information (Please type application)

Name of lead applicant:

Street Address:

City, State, Zip:

Phone: Email:

Name and title of Dean/Director: Post-secondary Institution:

Street Address:

City, State, Zip:

Phone: Email:

### Section II: Proposal Description

Title of proposal:

Please attach a separate Word document to describe the proposed EHR Curriculum (course, training module, workshop, continuing education course, etc) you plan to develop using the items listed below as an outline for your proposal. Limit your description to 2 pages, or approximately 500 words using either Arial or Times New Roman font size 12.

1. Cover Page: Title of proposal, lead applicant’s name and associates, affiliated post-secondary institution, and summarize your proposal in less than 100 words. This page will not count as part of the 500 word limit.
2. Provide a more detailed description of the proposal. Briefly explain need for course and topics you plan to include in the curriculum to promote understanding and use of electronic health records for your target audience. Will this be a new course or a unit added to an existing course? Will it be for credit or non-credit, or leading to a certificate or degree? How many actual classroom hours are planned? Will it be delivered in person or online? Will you develop a syllabus and learning objectives?
3. Explain what will be expected of students in terms of workload and how they will be evaluated (class participation, presentations, projects, community projects, papers, reading, tests, lab, etc.)
4. Where, when and how often will the new curriculum be offered to students? Future plans for curriculum?
5. Approximately how many students do you expect will complete the curriculum within 6 months and 12 months after receiving the award? How did you arrive at those numbers?
6. What is your affiliation with the post-secondary institution? Describe your teaching experience over the past three years by listing the courses you’ve taught and the name of the institution where they were taught. Approximately how many students were enrolled in those courses during this time period? What are the credentials of others who will teach the curriculum?
7. Do you plan to attend the fall 2011 EHR Workforce Development Conference? How might you present your EHR-related curriculum to others? What topics would you like to see covered at the conference?

How much are you requesting for your award? ________________________

The amount cannot exceed $3000. Please note that these awards are to individuals therefore winners will receive taxable income. The University of Nebraska will file the appropriate tax forms on behalf of Wide River TEC.

Continued on next page.
I agree to provide Wide River TEC with the following: (a) the EHR Curriculum Plan and One-Page Project Summary within 3 months of receiving initial award, (b) a Workforce Development Conference presentation by Sept 16, 2011; (c) the 60 day report and final progress reports as requested. (Check box if you agree.)

<table>
<thead>
<tr>
<th>Electronic signature</th>
<th>Date</th>
</tr>
</thead>
</table>

☐ Check here to indicate your typed name can be used as your e-signature. Or scan application form, sign & email with other application materials.
Appendix B: FAQ for EHR award applicants
1. **Tell me more about the letter of endorsement from a post-secondary institution.** Applicants are required to include a letter of endorsement from a Dean or Department Chair of an affiliated post-secondary institution. The letter will serve as a reference for the applicant and the applicant’s ability to develop an EHR-related curriculum and deliver EHR training according to award instructions. Please don’t hesitate to contact Elizabeth Willborn if you or the institution have questions about this.

2. **My email bounced back. Is there an alternate email address where I can ask questions about the application process?** Yes. You may contact Elizabeth Willborn at ewillborn@nebraska.edu or at EHRawards@gmail.com Please use either email address to contact Liz with questions about the process or to submit your completed application.

3. **I understand The Office of the National Coordinator of Health Information Technology (ONC) has provided funding to institutions of higher education to support health information technology curriculum development. Are any of these materials available for use in planning a course?** The Curriculum Component Blueprints were recently posted as a PDF in the end of the Curriculum Development Centers Program page on the ONC website. If you are reading this online, [click here](#) for the curriculum blueprints. We encourage applicants to use the Curriculum Component Blueprints and other information on the ONC website as you plan your proposal.

4. **Who will receive the award money; the applicant or the affiliated post-secondary institution?** The lead applicant will receive half the award money soon after the award winners are announced and the other half when the EHR Curriculum Plan and One-Page Project Summary are submitted and approved.

5. **Can educators who applied previously apply again?** Yes. Previous award winners may apply again for a new project which furthers the integration of EHRs in a curriculum. The review committee will not be able to present awards to proposals which are inherently a continuation of the first award.

6. **How will I know if Wide River TEC received my application materials?** You should receive an email confirmation within 3 business days after submitting your application. If you do not receive a confirmation after 3 days, please contact Elizabeth at ewillborn@nebraska.edu or at EHRawards@gmail.com.
Appendix C: Review evaluation form for the EHR awards
To the reviewer:
Use a separate form for each proposal you are reviewing. This page contains the questions asked on the application. Please make notes on the applicant’s responses to these questions on this sheet. Your responses will be used for review purposes only and will be kept confidential. Applicants will not have access to completed review forms. Please bring both sheets to the review committee meeting.

1. Is there a cover page with the proposal title, applicant(s) and a clear summary statement?
2. Did applicant identify the need for this proposal and topics to be covered?
3. Who is the target audience for this curriculum?
4. Will this be a new course or an addition to an existing course?
5. Will the curriculum be part of a degree or certificate program? Credit or non-credit?
6. How many hours of instruction are planned for the EHR-related curriculum? What is the planned format (lecture, online, workshop, etc)?
7. Did applicant specify a plan for a syllabus and learning objectives?
8. What will be expected of students in terms of workload and evaluation?
9. Where, when and how often will curriculum be delivered? Any other future plans?
10. Approximately how many students are expected to receive training 6 months ______ and 12 months ______ after initial award has been received.
11. Qualifications of applicant and teachers? What is the applicant’s affiliation with the institution?
13. How much money did applicant request?
14. Please list the primary strengths and limitations of this proposal. Is anything missing?
   Strengths:          Limitations:
Other comments:

Check items included with application:

- Competed and signed application form and cover page information
- Letter of endorsement from Dean or Department Chair from post-secondary institution
- Applicant resume/vita
- Document describing proposed course plans in 1-2 pages and no more than 500 words

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. 0058-1110
Appendix D: Students trained by curriculum development award courses
<table>
<thead>
<tr>
<th>Award Information</th>
<th>Total number of students who completed EHR training by June 2012</th>
<th>Total expected number of students who will complete EHR training by Dec 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Electronic Health Records in the Undergraduate Baccalaureate Nursing Program at UNMC, College of Nursing – Lincoln Campus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kathleen Duncan, PhD, RN and Christie Grossman, PhD, RN, and The University of Nebraska Medical Center College of Nursing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: EHR material integrated into undergraduate core courses beginning Fall 2011 (Lincoln) and fall 2012 (Kearney).</td>
<td>80</td>
<td>160 (Lincoln)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>102 (Kearney)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>262 (total)</td>
</tr>
<tr>
<td>Educating Graduate Nursing Students on the Meaning and Application of the Meaningful Use Rule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barbara Sittner, RN, PHD and The University of Nebraska Medical Center College of Nursing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: EHR material integrated into an online required graduate nursing course beginning fall 2011. Students are from all over NE, from other states, and a few from other countries.</td>
<td>148</td>
<td>198</td>
</tr>
<tr>
<td>Assimilating EHRs into a Nursing Curriculum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connie Miller, PhD and The University of Nebraska Medical Center College of Nursing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: Online course to teach faculty how to integrate EHRs into coursework. Available to UNMC-CON faculty at Omaha, Lincoln, Norfolk, Kearney and Scottsbluff.</td>
<td>25</td>
<td>35</td>
</tr>
<tr>
<td>Award Information</td>
<td>Total number of students who completed EHR training by June 2012</td>
<td>Total expected number of students who will complete EHR training by Dec 2012</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><em>Development of an Interactive EHR as a Training Tool for Pharmacy Students</em></td>
<td>NA</td>
<td>360</td>
</tr>
<tr>
<td>Michele Faulkner, Keith Christensen and Tom Lenz, and Creighton University School of Pharmacy and Health Professions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes: Award helped purchase new interactive components (student progress notes and a template for instructors to upload de-identified pt. data) for an already existing student EHR. New EHR course material for students begins fall 2012.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Fostering Best Practice with EHRs for Occupational Therapy and Physical Therapy Students</em></td>
<td>220 completed coursework and of those, 61 received an optional certificate in EHRs.</td>
<td>220</td>
</tr>
<tr>
<td>Jacy VerMaas-Lee, Helene Lohman, Kelly Nelson and Cortni Krusemark and Creighton School of Pharmacy and Health Professions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes: EHR education integrated into multiple courses beginning Fall 2011.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Introduction to Biomedical Informatics: includes a new modules on EHRs</em></td>
<td>NA</td>
<td>10</td>
</tr>
<tr>
<td>James McClay, MD and University of Nebraska Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes: EHR material will be offered to graduate students in related fields fall 2012.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Incorporating EHR in Health Care Information Systems and Advanced Health Care Information Systems Courses</em></td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Siti Arshad-Snyder, MSCSM and Clarkson College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes: Course first offered spring 2012.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Award Information</td>
<td>Total number of students who completed EHR training by June 2012</td>
<td>Total expected number of students who will complete EHR training by Dec 2012</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>EHR and Project Management</strong></td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>Siti Arshad-Snyder, MSCSM and Clarkson College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes: Course first offered fall 2011.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Introducing EHRs in the Health Care Business Management Program</strong></td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>Gretchen Jopp, RHIA, CPC and Clarkson College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes: New EHR content offered in course every summer beginning in 2011.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Introducing PACs to Sonography Students</strong></td>
<td>21</td>
<td>47</td>
</tr>
<tr>
<td>Donald LaFleur, BS, RDMS, RDCS and BryanLGH College of Health Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: New content offered in summer courses beginning in 2011. Typically there will be 20-25 per course, but in 2013, there will be 2 courses with a total of 41 students.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EHRs and the Simulated Clinical Experience</strong></td>
<td>NA</td>
<td>150-200 students and faculty.</td>
</tr>
<tr>
<td>Kim Leighton, PhD, RN, CN and BryanLGH College of Health Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: First use by students will be fall 2012.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Electronic Health Records in Long Term Care</strong></td>
<td>36</td>
<td>Undetermined</td>
</tr>
<tr>
<td>September Stone, RN, MSN and Nebraska Health Care Learning Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes: The workshop was held in Lincoln in February 2012. All sessions were filmed and will be used for the website and/or continuing education.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Award Information</td>
<td>Total number of students who completed EHR training by June 2012</td>
<td>Total expected number of students who will complete EHR training by Dec 2012</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>Let’s Get Comfortable with EHR Applications</td>
<td>74</td>
<td>150+</td>
</tr>
<tr>
<td>Joni Schlatz, MS, RHIT and Central Community College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: First offered new projects in 2011.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to Health Informatics</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Diane Hoffmann, MSN, MSEd, RN and Mid-Plains Community College</td>
<td></td>
<td></td>
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<tr>
<td>Notes: Online semester course first offered January 2012.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to EHRs: A Workshop for Nursing Students</td>
<td>24</td>
<td>50</td>
</tr>
<tr>
<td>Michelle Rule and Metropolitan Community College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes: Half-day workshop offered quarterly for nursing students. First offered January 2012.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIT Pro Competency Exam Prep Course</td>
<td>37</td>
<td>100</td>
</tr>
<tr>
<td>Michelle Rule and Metropolitan Community College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes: This non-credit, self-paced review course is offered online at the QUIA website and was first available April 2012. <a href="http://www.quia.com/profiles/healthit">http://www.quia.com/profiles/healthit</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EHR, Meaningful Use and You</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Lisa Lechowicz, MS and Metropolitan Community College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes: Online 4-hour workshop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of students who have completed an EHR-related course as a result of the EHR Curriculum Development Awards</td>
<td>738</td>
<td>1729</td>
</tr>
</tbody>
</table>