Rural Health Information Technology Workforce Program
Health IT Curriculum Deliverable
Livingston Community Health Services

Narrative of Course Offerings Selection Process

In our original grant application, we indicated that we would review course offerings with our academic partner to revise or adapt materials to align with project goals. We knew that we wanted to align our curriculum with the former HIT Pro exams, now the AHIMA Certified Healthcare Technology Specialist (CHTS) certifications. Our curriculum needed to be targeted to specific roles among the six available under the CHTS umbrella, so we set out to analyze which roles and course offerings would be most valuable for our students and the clinics where we planned to place our students for their apprenticeships later in the program. We also heard feedback from our college partner that their 10-11 classes per specialization track was overwhelming for students. We wanted to prevent our students from feeling overwhelmed, while still offering the most relevant curriculum to help them meet their educational and professional goals.

We completed this analysis and revision twice, prior to each of the two cohorts of students that were trained between 2014 and 2016. After receiving the Notice of Grant Award in 2013, we administered a Needs Assessment to our healthcare network members. We provided a list of all 20 components available from the ONC curriculum, and asked them to rate which ones they saw as most valuable for students to complete in their training to become Certified Healthcare Technology Specialists. We also asked them which employment roles they anticipated needing to hire over the next 2-3 years, and combined this data for a foundation in our curriculum evaluation at the end of 2013.

After completing our analysis, we determined that our healthcare partners saw a need for students to fulfill three roles of the six CHTS certifications: Practice Workflow & Information Management Redesign Specialist, Technical/Software Support Specialist, and Trainer. We looked at the ONC's curriculum matrix and at the courses our clinics indicated as the priority for them, both in the 2013 and 2014 Needs Assessments. Between these two data sources, we revised the track offerings from our academic partner, Fresno City College, taking our the "Implementation Support Specialist" that would have been more relevant around 2010/2011 when providers were first looking at Meaningful Use, and added the Technical/Software Support Specialist and Trainer to reflect ongoing maintenance needs facing the organizations.

To this end, evaluations, conversations, and revisions made, our final course offerings included:

		Practice Workflow & Information Management Redesign Specialist	Technical/Software Support Specialist	Trainer
ONC Component	Course			
#2	Culture of Health Care (w/ Billing & Coding Intro)	X		X
#4	Introduction to Information & Computer Science	X	X	X
#3	Terminology in Health Care & Public Health Settings	X		
#6	Health Management Information Systems	X		X
# 10	Health Workflow Process Analysis & Redesign	X		
#20	Training and Instructional Design			X
#15	Usability and Human Factors	X		X
#12	Quality Improvement	X		
#8	Installation and Maintenance of Health IT Systems		X	

The courses were taught over an eight month period and administered through the Blackboard LMS environment. Students did not receive academic credit, instead receiving a letter and certificate verifying their completion of coursework at the end of the program.

The schedule for the second cohort was:

HIT Training - Cohort 2

Central Valley Collaborative Rev: 11.24.2014

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Session	ONC #	Component		
1	#2	Culture of Health Care (w/ Billing & Coding Intro)	Req'd	Feb 17 - Apr 14
1	#4	Introduction to Information & Computer Science	Req'd	Feb 17 - Apr 14
2	#3	Terminology in Health Care & Public Health Settings	Req'd	Apr 20 - Jun 12
2	#6	Health Management Information Systems	Req'd	Apr 20 - Jun 12
3	# 10	Health Workflow Process Analysis & Redesign	Req'd	Jun 22 - Aug 14
3	#20	Training and Instructional Design	Req'd	Jun 22 - Aug 14
3	#15	Usability and Human Factors	Elective	Jun 22 - Aug 14
4	#12	Quality Improvement	Req'd	Aug 24 - Oct 16
4	#8	Installation and Maintenance of Health IT Systems	Elective	Aug 24 - Oct 16

We made two courses electives which would allow students to focus on more of a technical track or a people-oriented track (workflow redesign and trainer roles). Some students chose to take all courses offered, while others chose to complete the electives. All students were exposed to common courses with content that they could apply to their apprenticeships and certification ambitions. Students were also directed to the AMIA resources for all ONC courses so that they could continue studying more in depth any other content they saw as valuable for their individual aspirations.

Courses are described more in depth on the following page.

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HIT Workforce Curriculum Components

Number	Title	Description
2	The Culture of Health Care	This component explains patterns of human behavior that include the language, thoughts, communications, actions, customs, beliefs, values, and institutions of the health care system. Behavior patterns in the health care system acquired and socially transmitted, including customs, traditions, and language.
3	Terminology in Health Care and Public Health Settings	This component explains specific terminology used by workers in health care and public health. Define commonly used terms in public health, nursing, health information technology, and clinical vocabularies & terminologies related to the implementation of electronic health records.
4	Introduction to Information and Computer Science	Introduction to Information and Computer Science is for students without an IT background. It provides a basic overview of computer architecture; data organization, representation and structure; structure of programming languages; networking and data communication. Includes basic terminology of computing.
6	Health Management Information Systems	This component introduces students to the health IT standards, health-related data structures, software applications, enterprise architecture in health care and public health objectives. Describe general functions, purposes and benefits of health information systems, why they are needed, and the benefits they provide in different healthcare and public health settings.
10	Health Workflow Process Analysis & Redesign	Fundamentals of health workflow process analysis and redesign as a necessary component of complete practice automation; includes topics of process validation and change management.
20	Training & Instructional Design	This course will provide an overview of learning management systems, instructional design software tools, teaching techniques and strategies, evaluation of learner competencies, maintenance of training records, and measurement of training program effectiveness. In addition, this course will discuss selecting and implementing Web 2.0 technologies as instructional technologies given a specific platform and training programs.
15	Usability and Human Factors	This course will give you the skills necessary to effectively apply principles of specific designs and usability evaluations, including technology evaluation and iterative design.
12	Quality Improvement	This component Introduces the concepts of health IT and practice workflow redesign as instruments of quality improvement. Addresses establishing a culture that supports increased quality and safety. Discusses approaches to assessing patient safety issues and implementing quality management and reporting through electronic systems.
8	Installation & Maintenance of Health IT Systems	This component covers fundamentals of selection, installation and maintenance of typical Electronic Health Records (EHR) systems. Students will be introduced to the principles underlying system configuration including basic hardware and software components, principles of system selection, planning, testing, troubleshooting, and final deployment. System security and procedures will also be introduced in this component.