


The Office of the National Coordinator for Health Information Technology




## Overview of Health IT Workforce Curriculum Development Centers Program

William Hersh, M.D.  
Oregon Health & Science University (OHSU)  
National Training and Dissemination Center (NTDC)

February 23, 2012

Putting the I in Health IT  
[www.HealthIT.gov](http://www.HealthIT.gov)

### ONC Health IT Workforce Training



Putting the I in Health IT  
[www.HealthIT.gov](http://www.HealthIT.gov)

- **Health IT Workforce Program Goals**
  - Addressing the shortfall of at least 50,000 trained workers
  - Training for the future of health IT
  - Helping providers implement and “meaningfully use” electronic health records to improve health care quality, safety, and cost-effectiveness

Office of the National Coordinator for Health Information Technology

1

## ONC Health IT Workforce Training

Putting the I in HealthIT  
www.HealthIT.gov

**Health IT Professionals**

**University-Based Training**  
Help more than 1,500 people receive certificates

**Community College Consortia**  
Help train more than 10,500 new Health IT professionals

**Curriculum Development Centers**  
Development of educational materials

**Competency Examination Program**  
Basic Competency Assessment

Office of the National Coordinator for Health Information Technology

2

## Curriculum Development Centers

Putting the I in HealthIT  
www.HealthIT.gov

➤ **Program information**

- Provides \$10 million in cooperative agreements to 5 institutions of higher education to support health IT curriculum development over a two-year period that began on April 2, 2010, and will end in Spring 2012.
  - Duke University
  - Columbia University
  - Johns Hopkins University
  - Oregon Health & Science University
  - University of Alabama Birmingham
- The awardees have developed 4 curriculum components each and collectively address 20 content areas.

Office of the National Coordinator for Health Information Technology

3

## Curriculum Development Centers

Putting the I in HealthIT  
www.HealthIT.gov

- Curriculum Components – the overall program has produced materials supporting instruction in 20 content areas:
  - Introduction to Health Care and Public Health in the U.S.
  - The Culture of Health Care
  - Terminology in Health Care and Public Health Settings
  - Introduction to Information and Computer Science
  - History of Health Information Technology in the U.S.
  - Health Management Information Systems
  - Working with Health IT Systems\*
  - Installation and Maintenance of Health IT Systems\*
  - Networking and Health Information Exchange
  - Fundamentals of Health Workflow Process Analysis & Redesign
  - Configuring EHRs\*
  - Quality Improvement
  - Public Health IT
  - Special Topics Course on Vendor-Specific Systems
  - Usability and Human Factors
  - Professionalism/Customer Service in the Health Environment
  - Working in Teams
  - Planning, Management and Leadership for Health IT
  - Introduction to Project Management
  - Training and Instructional Design

\*lab component

Office of the National Coordinator for  
Health Information Technology

4

## Curriculum Development Centers

Putting the I in HealthIT  
www.HealthIT.gov

- National Training and Dissemination Center (NTDC)
  - One of the awardees, Oregon Health & Science University (OHSU), also serves as the National Training and Dissemination Center (NTDC) for the materials.
  - This center:
    - Organized and hosted an in-person training event for community college faculty during the first year of the project.
    - Established a secure website from which all materials may be downloaded.
    - Manages the download process and offers help as needed.
    - Supports the VA VistA for Education software used for the three lab components.

Office of the National Coordinator for  
Health Information Technology

5

## Curriculum Development Centers

Putting the I in HealthIT  
www.HealthIT.gov

### ➤ Program information

- Version 3.0 will be released to the public in mid- to late March 2012.
  - New and improved content, especially on privacy and security, meaningful use
  - Better integration of content across components
  - More robust accessibility features
  - Standardized document formats and naming
  - Search and index tools added to the NTDC site
- Version 2.0 of the materials was released to the public in June 2011 after Version 1.0 had been used by the Consortia member colleges since August/November 2010.

## Curriculum Development Centers

Putting the I in HealthIT  
www.HealthIT.gov

### ➤ Curriculum Component Terminology

- I. Curriculum, meaning a group of courses at an institution
  - A. Course, meaning a group of related instructional class sessions over a period of time
    1. Curriculum Component, meaning the blueprint and teaching materials covering a specific health IT content area that are used to develop a course
      - a. Unit of a component, meaning a lesson or set of lessons on a topic
        - (1) Element of a unit, such as a lecture or activity

## Curriculum Development Centers

### ➤ Content of the Components

- Each lecture is accompanied by the PowerPoint slide presentation, a slide handout, an mp3 audio file, and a transcript of the audio. Flash presentations are also available.
- Also available are learning activities, discussion questions, and self-assessment questions.
- All discussion and self-assessment keys include expected/suggested outcomes and reference unit objectives from the blueprint and the appropriate lecture or other materials.
- The volume of materials (V2) is large: 7.8 GB of information made up of over 12,000 files across 213 units.

## Lab components make use of VA VistA

The screenshot shows a VistA patient record for 'EIGHT PATIENT' (ID: 666-00-0008, DOB: Apr 07, 1935). The record is organized into several sections:

- Active Problems:** Headache, Hypertension, Hyperlipidemia, Acute Myocardial Infarction, Unspecified Site, Episode Of Care Unspecified, Chronic Systolic Heart Failure, Diabetes Mellitus Type II Or Unspecified.
- Allergies / Adverse Reactions:** Penicillin, Chocolate.
- Postings:** Allergies (May 21, 2000), Crisis Note (May 16, 2007), Advance Directive Completed (Oct 18, 2000), Advance Directive (Oct 18, 2000).
- Active Medications:** Metoprolol Tartrate 50mg Tab, Simvastatin 40mg Tab, Non-VA Aspirin 81mg Ec Tab.
- Clinical Reminders:** Depression Screening, PC Nutritional Screening, Diabetes - Urinalysis, Influenza Vaccine, Pneumococcal vaccine (Pneumovax).
- Due Date:** DUE NOW for all reminders.
- Recent Lab Results:** No Orders Found.
- Vitals:** T 98.5 F, P 74, R 22, BP 134/81, HT 70 in, WT 178 lb, PNI 1, POX 98, BMI 25.59.
- Appointments/Visits/Admissions:** Aug 26, 10 21:19 (Cardiology - Action Required), Aug 12, 10 08:00 (General Medicine - Action Required), Aug 11, 10 08:00 (General Medicine - Action Required), Aug 10, 10 08:00 (General Medicine - Action Required), Aug 09, 10 08:00 (General Medicine - Action Required).

Can be downloaded from NTDC but requires Intersystems Cache license (only free at academia).

## Curriculum Development Centers

Putting the I in HealthIT  
www.HealthIT.gov

### ➤ How the Components are Used

- Blueprints have been written for each component to outline component objectives, unit topics and objectives, some detail on the unit lessons and elements
- A matrix of curriculum components and workforce roles has been created as a guideline for using components to train for particular workforce roles, nicknamed the “set table.” The matrix illustrates the core set of components for each role for two types of student backgrounds, health care and IT.
- Curriculum components should be viewed as a resource that can be modified, as an “educational buffet.” Components do not need to be used in their entirety; rather, colleges may choose the components and units that best fit their needs.

Office of the National Coordinator for  
Health Information Technology

10

## Curriculum Development Centers

Putting the I in HealthIT  
www.HealthIT.gov

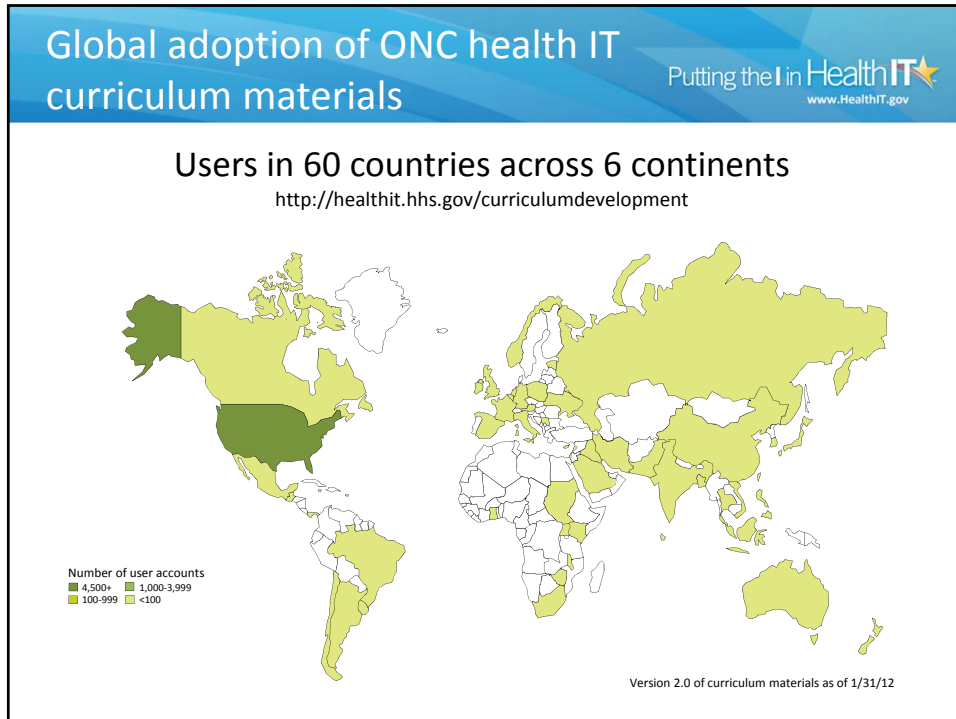
### ➤ Intellectual property issues

- Per original funding announcement, universities own intellectual property for their components.
- For public rollout, adopting a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.
- This means all users can use, share, and adapt but must:
  - Attribute originator of work
  - Use only for non-commercial purposes
  - Share any changes made under same license



Office of the National Coordinator for  
Health Information Technology

11



Curriculum Development Centers

Putting the I in HealthIT  
www.HealthIT.gov

➤ How to Access the Materials

- To obtain the curriculum materials, go to <http://www.onc-ntdc.org> or <http://www.onc-ntdc.info> to set up a profile and download the components.
- Visit the ONC website at [hhs.healthit.hhs.gov](http://hhs.healthit.hhs.gov) to learn more about the Curriculum Development Centers program and other ONC health IT workforce development programs.

Office of the National Coordinator for Health Information Technology

13