# Workforce Development: Community College Consortia to Educate Health IT Professionals

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# Agenda

- Scope of Need
- Response to Need
- Partners and Products
- Roles
- Challenges and Opportunities
- What's Next?

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# The Need for a Large Scale Response

- Accelerated program to prepare the ***workforce*** for a projected need for over 70,000 healthcare IT specialists by the end of the decade – 50,00 in near future
- Improve the capability of colleges and universities to quickly educate the new workforce: ***sustainability***
- Increased ***collaboration*** between higher education and employers
- Use of funds from The *American Recovery and Reinvestment Act* (ARRA) of 2009 to significantly enhance the ***skills*** of the workforce

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# Scope of the Response

- A Two Year Project from April 2010 to April 2012 funded by the Office of the National Coordinator for Health IT at the Department of Health and Human Services
- A collaborative project of 82 colleges in all fifty states divided into five separate regions – a truly nationwide response with flexibility built in to allow for local variation in response to needs of employers and resources of participating colleges

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# Scope of the Response

- Develop or improve  non-degree health IT training programs that students can complete in six months or less
- Goal by end of 2011: 7,000 graduates  per year
- Goal by end of 2012: 10,500 graduates per year
- A capacity building grant: increase the capability of colleges to continue the offering of courses after the completion of funding
- Focused on both new employees and incumbents

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# Office of Provider Adoption Support (OPAS)

- Goal: Assist All Providers to Achieve Meaningful Use of EHR Systems
- Collaboration Between:
  - Community College Consortium
  - Provider Adoption Services
  - Meaningful Use
  - Regional Extensions Centers
  - Health Information Technology Research Center (HITRC)

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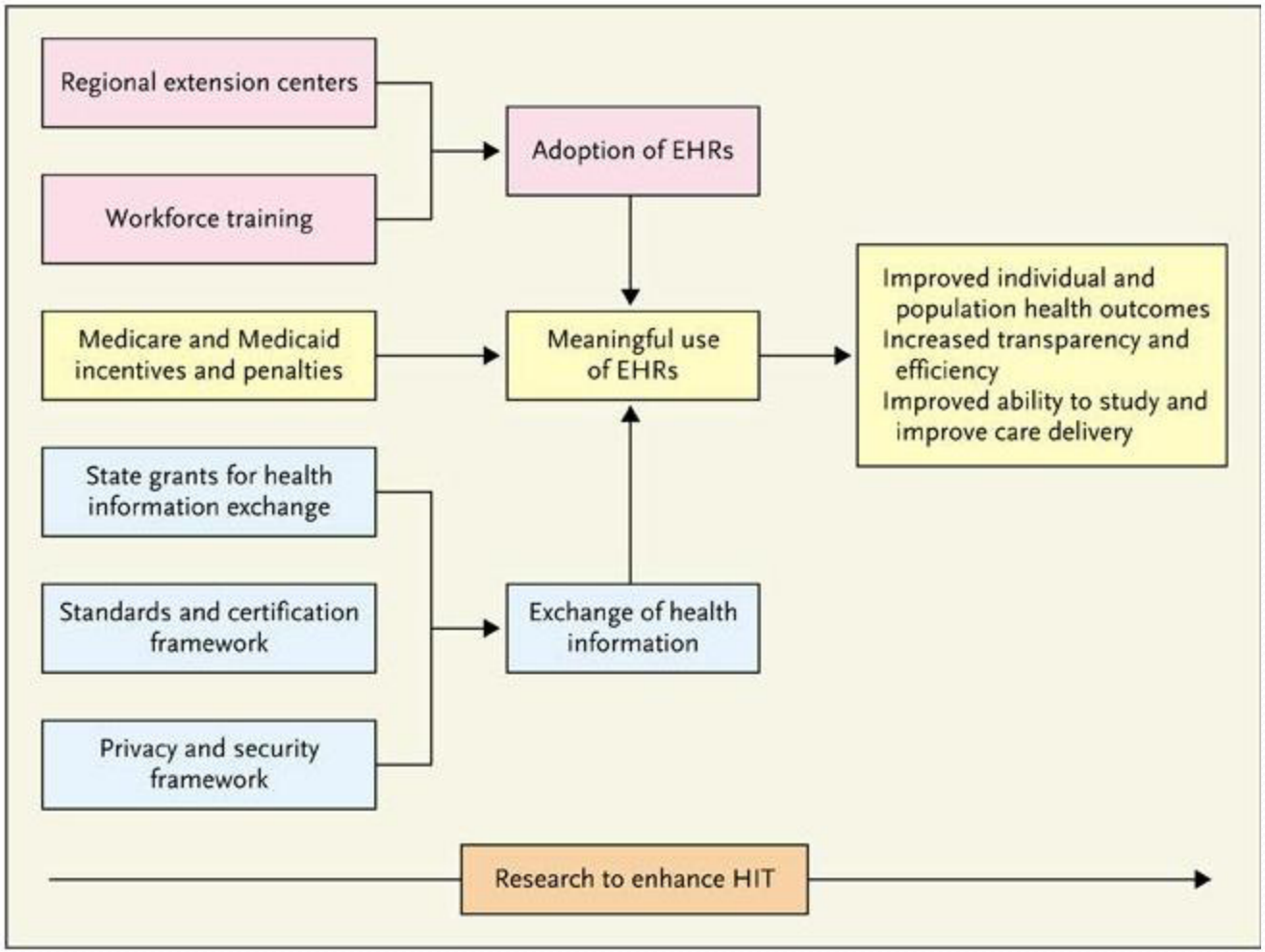


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# Parallel University Efforts

- Development, continuous improvement and dissemination of curriculum for all six roles (five universities)
- 1500 people receive certificates of advanced study under Program of Assistance for University-Based Training
- $32 million grant to quickly establish or significantly expand health IT opportunities for professionals
- One year at Baccalaureate level, two years at Masters

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# RECs

- February 2010: $375 million awarded to establish 32 RECs to act, in part,  as partners to educators and employers: internship and employment opportunities
- April 2010: $267 million awarded to establish an additional 28 RECs
- September 10, 2010: nearly $20 million in additional funding awarded to 46 existing RECs to support critical access and rural hospitals in their efforts to adopt certified EHR technology

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# Curriculum Development

- $10 million Curriculum Development grant awarded to five universities to jointly develop a common curriculum which can be modified, enhanced and adjusted by the participating colleges as needed
- Version 1.0 was issued last September
- Version 2.0 was released last week
- Version 3.0 will be released at the end of the project in 2012
- All curricula will be made released for general use by end of summer 2011

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# Curricular Focus

- Health
- Information Technology
- Health Information Technology
- Environment for Implementation
- Soft Skills
- Others as needed: local additions
- Attention to covering the realistic requirements of those involved in attaining meaningful use

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# Curricula

- 1.Introduction to Health Care and Public Health in the U.S
- 2.The Culture of Health Care
- 3.Terminology in Health Care and Public Health Settings
- 4.Introduction to Information and Computer Science
- 5.History of Health Information Technology in the U.S.
- 6.Health Management Information Systems
- 7.Working with Health IT Systems
- 8.Installation and Maintenance of Health IT systems
- 9.Networking and Health Information Exchange
- 10.Fundamentals of Health Workflow Process Analysis & Redesign

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# Curricula

- 11. Configuring EHRs
- 12. Quality Improvement
- 13. Public Health IT
- 14. Special Topics Course on Vendor-Specific Systems
- 15. Usability and Human Factors
- 16. Professionalism/Customer Service in the Health Environment
- 17. Working in Teams
- 18. Planning, Management and Leadership for Health IT
- 19. Introduction to Project Management
- 20. Training and Instructional Design

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# Competency Exams

- Six separate competency exams have been developed and can be taken at student's discretion online at any point after completion of the coursework
- Some, but not complete, overlap with courses as taught – need for student preparation
- Assess basic proficiency in critical, high-value health IT subject areas based on intense education
- Not a degree but a recognition of achievement of value to employers

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# Funding and Parameters

- $11 million plus over two years  to Workforce and Economic Development Center at Los Rios Community College District in Sacramento, CA
- Centralized administrative staff with project managers, directors and faculty leads at each college which receives direct funding
- Program free to students who participate: costs, including enrollment fees, paid for by grant

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# Western Region Consortium

- Thirteen (originally fourteen) colleges in four states
- California
  - Butte College
  - Cosumnes River College
  - Mission College
  - Fresno City College
  - Santa Barbara City College
  - Santa Monica Community College
  - East Los Angeles College
  - Orange Coast College
  - San Diego Mesa College

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# Western Region Consortium

- Nevada
  - College of Southern Nevada
- Arizona
  - Gateway Community College
  - Pima Community College
- Hawai'i
  - University of Hawai‘i Community Colleges

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# Western Region Solutions

- Mixture of completely online programs and hybrids
- Mixture of completely not-for-credit and for-credit
- Some colleges had extensive health IT programs while others beginning development
- 1409 students enrolled as of April 2011
- 833 continue in study with staggered graduations
- Each college with annual goal of 150 per project year and 4200 total for region

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# Student Profile

- Approximately 50% with healthcare background
- Approximately 50% with IT background
- A very small number with background in neither of those arenas
- A very wide range of experience from those entering with little work experience to RNs and retired Health Professionals
- Courses to accommodate a wide range of work and technical experience and backgrounds
- Each college sets its own admission criteria

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# Context for Roles

- Respond to the greatest workforce needs – maximize both educational and employment opportunities
- Roles developed by joint DHHS and Department of Labor research on merging healthcare IT occupations until end of decade and beyond
- Responsive to range of educational backgrounds and career aspirations for students
- Some colleges offer all six roles while others offer just two: adjusted to local employer needs and program capacities

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# Targets for Roles

- These roles are needed for ongoing support of health IT that has been deployed in:
  - office practices
  - hospitals
  - health centers
  - long-term healthcare facilities
  - Health information exchange organizations
  - local public health agencies

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# Roles

- Built around the need for flexibility and potential for movement between different roles
- Students can complete courses and take competency exams in more than one role in the course of the project
- Some common classes to allow for students to handle accelerated pace and accomplish meaningful education
- Leading directly to employment by REC's, IT providers, vendors, large employers etc.

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# Roles: Differing Responsibilities

## Community Colleges

- Practice Workflow and Information Management Redesign Specialist
- Clinical/Practitioner Consultant
- Implementation Support Specialist
- Implementation Manager
- Technical/Software Support Staff
- Trainers

## Universities

- Clinical/Public Health Leader
- Health Information Management and Exchange Specialist
- Health Information Privacy and Security Specialist
- Research and Development Scientist
- Programmer and Software Engineer
- Health IT Sub-specialist

# Two Tracks

## Mobile Adoption Support Positions

- Practice Workflow and Information Management Redesign Specialist
- Clinician/Practitioner Consultant
- Implementation Manager
- Implementation Support Specialist

## Permanent Staff of Health Care Delivery and Public Health Sites

- Technical/Software Support Staff
- Trainer

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# Roles

- **Practice Workflow and Information Management Redesign Specialist**
  - Reorganizing work for taking advantage of IT potential in meaningful use
  - Background in either healthcare (e.g. practice administrator) or in IT but not licensed clinical professional

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# Roles

- **Clinical/Practitioner Consultant**
  - Based on Practice Workflow and Information Management Redesign Specialist but for individuals licensed to provide clinical care, or a public health background
  - Higher level of experience

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# Roles

- **Implementation Manager**
  - On-site management of adoption support teams during implementation
  - Hybrid of IT, healthcare and administrative/ managerial experience
  - Higher levels of experience required: mid-career specialization

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# Roles

- **Implementation Support Specialist**
  - Direct support during implementation as team member
  - Provide support above and beyond that provided by vendor
  - Responsibility for functionality and configuration to meet needs of redesigned practice workflow
  - General background in information technology or health information management

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# Roles

- **Technical/Software Support Staff**
  - Support ongoing implementation in healthcare clinical and public health settings
  - Patching and upgrading software
  - “Helpdesk” role: most common across all the programs
  - General background in IT or health information management
  - In many ways the “entry-level” position for the project

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# Roles

- **Trainer**
  - Design and deliver training based on adult learning principles
  - General background
  - Desired: experience as a trainer

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# Challenges and Opportunities

- Marketing/Outreach
- Teaching and building curriculum as you go
- Linking to the right student: commitment, interest, ability and adaptability
- Readiness of students to engage in intensive, online education in an accelerated format
- Higher attrition rate than in face-to-face programs but consistent with other online programs (25%)

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# Challenges and Opportunities

- The preparation of the workforce with more general education instead of in-depth, software-specific  training
- Budget constraints for the continuation of the programs
- Job Placement: Ultimate goals of all ARRA-funded Programs

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# Challenges and Opportunities

- Some colleges have achieved a 50% placement rate at program completion – including the "hiring-out" of students before they complete the program
- Additional refinement of educational process
- Alignment of curriculum to the needs of employers – and ultimately securing employment
- Outreach to rural and economically disadvantaged communities

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# Of Course: RECs

- Developing adequate relationships with RECs and potential employers for internships
- Aligning with REC to produce professionals that can be of immediate service
- Regional Extension Centers – Enrolled 53,000 providers nationwide
- California Examples
  - CalHIPSO – 3717
  - CalOptima - 200
  - HITEC – LA: 2000
- What Can We Do Next?

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# Further Information

- www.healthit.gov
- www.wrhealthit.org


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