# Attachment 2: A Resource Guide for Health Information Technology

A *Resource Guide for Health Information Technology* is a reference providing program planners and service providers with practical information about the HHS Office of the National Coordinator for Health Information Technology (ONC) and its initiatives and grant investments to prepare the emerging Health-IT workforce.

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#### Background

The Health Information Technology for Economic and Clinical Health (HITECH) Act, enacted as part of the American Recovery and Reinvestment Act (ARRA) of 2009, promotes the adoption and meaningful use of health information technology (HIT). The Office of the National Coordinator for Health Information Technology (ONC) located within the Office of the Secretary for the U.S. Department of Health and Human Services (HHS) is charged with coordinating the nationwide efforts to implement and use the most advanced health information technology to enable the electronic exchange of health information. The ONC set a goal for the utilization of an Electronic Health Record (EHR) for each person in the United States by 2014. To support this objective, the ONC has coordinated a suite of investments to educate health information technology professionals.

# Developing a Health IT Workforce

The use of technology across the health and human services industry is fragmented. Although some providers have implemented medical records management software, there is still an extensive use of hard copies for forms exchanged between doctors, labs, hospitals, clinics and other health and human services providers. The use of technology for information exchange has proven to save administrative time, contain costs, and reduce errors. Health and human service providers are currently taking advantage of a unique opportunity to implement and meaningfully use EHRs.

The federal government has committed unprecedented resources to support the adoption and use of EHRs. The installment of an EHR system now is a solid investment for the future because:

- **It's where the profession is going:** 90% of medical students consider it important or very important to have an EHR where they choose to practice.<sup>8</sup>
- **It's what patients want:** Four out of five adults believe that online personal health records would be beneficial in managing their health and health care.<sup>9</sup>
- It makes coordinated care a reality: EHRs are an essential component of health care innovation efforts such as the Patient Centered Medical Home and Accountable Care Organizations.
- Incentives now available: For healthcare providers that are eligible, there is a limited window of opportunity to take advantage of Medicare and Medicaid EHR Incentive Programs designed to support the implementation of certified

EHRs. A fully functional certified EHR will be essential to participation in both public and private pay-for-performance programs expected in the future.

Due to the legislative timeline and incentives to health providers to be early adopters of EHR, many health and human services providers are changing existing workflows and processes to effectively implement EHR. Some have only just begun, while others have not yet started.

# **Building a Regional Partnership**

The information found in this resource is provided for use by workforce investment partners to support collaboration with the Health Information Technology Regional Extensions Centers (HITRECs) and schools in the Health and Human Services Office of the National Coordinator (HHS ONC) Community College Consortia (see Attachment C) to educate, assess, and employ the workforce required for EHR implementation efforts. In support of this collaboration, we have developed an EHR competency model, and the blocks represent competency areas, that is, the applied skills, knowledge, abilities essential to successful performance in the increasingly electronic environment of the health industry. The EHR model is posted and available for downloading on the Competency Model Clearinghouse (CMC) Web site at <a href="http://www.careeronestop.org/competencymodel/pyramid.aspx?EHR=Y">http://www.careeronestop.org/competencymodel/pyramid.aspx?EHR=Y</a>.

We are asking workforce system leaders in regional areas to convene with interested stakeholders including health care employers and educators to discuss this critical workforce with the Health Information Technology Regional Extension Centers (HITRECs). HITRECS offer technical assistance, guidance and information on best practices to support and accelerate health care providers' efforts to become meaningful users of Electronic Health Records (EHRs). There are an estimated 70 HITRECs supporting primary care providers in achieving meaningful use of EHRs and enabling nationwide health information exchange in a defined geographic area. See Attachment B for a complete list of HITRECs to determine if there is a Center in your vicinity.

Rural health providers and State Offices of Rural Health, face special geographic challenges in their effort to deliver quality care. The realities of distance and attracting and retaining qualified professionals, can complicate health care delivery. The widespread adoption of Health information technology (health IT) can help ameliorate some of those problems. However, rural health care providers face several barriers to health IT implementation. These include:

- Lack of broadband internet access;
- Limited career pathways for the health information workforce; and
- Insufficient financial capital to implement electronic health record (EHR) systems.

The ONC has developed a Rural Health IT Adoption Toolbox available on-line at <a href="http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/index.html">http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/index.html</a> that

includes useful information about getting started, program planning, and project staffing and management.

The HITREC is a resource to help foster regional collaboration to meet the following objectives:

- Describing the types of occupations associated with Health IT/EHR professions in your region and the skills needed to perform successfully in these roles;
- Locating sources of Health IT/EHR training, assessment vouchers and employment opportunities; and,
- Learning about transferrable skills and work experiences from prospective Health IT employers.

The outcomes from a coordinated approach include:

- Establishing a plan for continued collaboration with HITRECs;
- Developing a process for working with local employers that have employment opportunities; and,
- Identifying training opportunities by working with local education providers.

#### **About this Resource**

This resource has four sections that will guide your conversation:

- Developing a Health IT Workforce
- Understanding Health IT Occupations
- Education and Employment Resources
- Appendices:
  - o Key Definitions
  - o Health Information Technology Regional Extension Centers (HITRECs)
  - Health and Human Services Office of the National Coordinator (HHS ONC) Community College Consortia Members

#### **Understanding Health IT Occupations**

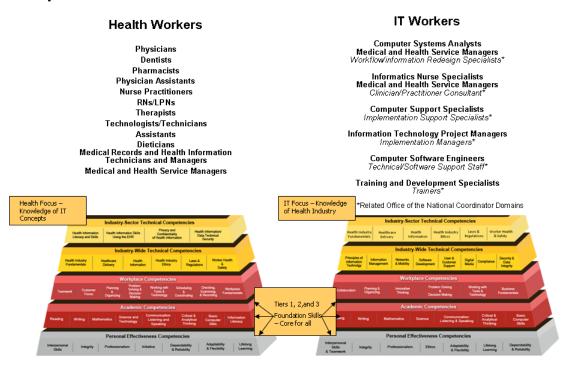
Successful EHR implementation requires enhanced workforce skills at several junctures:

- Project management during implementation
- Training and staff support for ongoing operation and maintenance
- New and enhanced skills for staff who interact daily with new technology

ONC initiatives and investments focus on training the IT workforce who will provide support for the implementation and maintenance of EHR. Over the past year the Employment and Training Administration (ETA) has worked with federal agencies and industry partners to identify the core competencies required to develop the training needed to prepare new and existing healthcare workers with the knowledge and skills to effectively use EHR. Refer to the EHR Competency Model for more information on the knowledge and skills required of the healthcare workforce. The Intersection of Health and IT in Figure 1 demonstrates the commonality of foundation competencies and the distinction in focus in the industry wide and industry technical competencies. Health workers need a broad knowledge of the health industry supplemented with IT concepts; whereas the Health-IT worker needs a strong background in IT concepts as they might apply to the culture and business of healthcare delivery.

Figure 1.

# Implementation of EHR - the Intersection of Health and IT



Health Industry – EHR Competency Model

IT Industry - EHR Competency Model

A Health IT worker (depicted to the right in Figure 1) is someone who is qualified to support the adoption and implementation of Electronic Health Records (EHRs), information exchange across health care providers and public health authorities, and the redesign of workflows within health care settings to gain the quality and efficiency benefits of EHRs. It is anticipated that implementation efforts will be supported a mobile project management team, as well as a permanent support staff at a health provider's location.

## **Mobile Project Management Team Positions**

The project management team must have leadership skills, management ability, patience, and vision. The team must realize that the implementation of a health IT system is a large, multifaceted project that will not always go as planned. The ability to deal with frustration constructively and seek opportunities in the face of adversity is a definite asset. Good communication skills, both verbal and written communication skills among team members and with the administration are essential for ensuring that a project is well managed and organized. With the increasing complexity of clinical system implementations, the need for well trained, skilled project managers is expected to increase.

These members of the workforce will support implementation at specific locations, for a period of time, and when their work is done, will move on to new locations. They might be employed by regional extension centers, hospitals, critical access hospitals, provider offices, vendors, or state/city public health agencies. The team would consist of:

| Position   | Workers in this role will:  | Past experience and anticipated training required:  |
|--|---|---|
| Implementation support specialists   | <ul> <li>execute implementation project plans</li> <li>install hardware (as needed)</li> <li>configure software to meet practice needs</li> <li>incorporate usability principles into design and implementation</li> </ul>  | Experience in information technology or information management  Three to six month certificate training for individuals with technical training   |
| Practice workflow<br>and information<br>management<br>redesign specialists | •conduct user requirements analysis to facilitate workflow design; •integrate information technology functions into workflow; •document health information exchange needs; •design processes and information flows that accommodate quality improvement and reporting; •work with provider personnel to | Backgrounds in health care (e.g., as a practice administrator) or in information technology, but are not licensed clinical professionals  Three to six month certificate training for health care or information management backgrounds |

|                | implement revised workflows; and      |                                      |
|----------------|---------------------------------------|--------------------------------------|
|                | •evaluate process workflows to        |                                      |
|                | validate or improve practice's        |                                      |
|                | systems                               |                                      |
| Clinician      | •suggest solutions for health IT      | Similar to the "redesign specialist" |
| consultants    | implementation problems in            | role listed above but brings to bear |
|                | clinical and public health settings;  | the background and experience of     |
|                | •address workflow and data            | a licensed clinical and professional |
|                | collection issues from a clinical     | or public health professional        |
|                | perspective, including quality        |                                      |
|                | measurement and improvement;          | Three to six month certificate       |
|                | •assist in selection of vendors and   | training for health professionals    |
|                | software; and                         |                                      |
|                | •advocate for users' needs, acting    |                                      |
|                | as a liaison between users, IT staff, |                                      |
|                | and vendors.                          |                                      |
| Implementation | •apply project management and         | Experience in health and/or IT       |
| managers       | change management principles to       | environments as well as              |
|                | create implementation project         | administrative and managerial        |
|                | plans to achieve the project goals    | experience.                          |
|                | •interact with office/hospital        |                                      |
|                | personnel to ensure open              | Training in any of the above plus    |
|                | communication with the support        | administrative experience            |
|                | team                                  |                                      |
|                | •lead implementation teams            |                                      |
|                | consisting of workers in the roles    |                                      |
|                | described above                       |                                      |
|                | •manage vendor relations,             |                                      |
|                | providing feedback to health IT       |                                      |
|                | vendors for product improvement       |                                      |

#### **Permanent Support Staff**

Staff of healthcare delivery and public health sites will be needed for the ongoing support and facilitation of health IT systems across the health care industry, in organizations such as office practices, hospitals, health centers, long term care facilities, health information exchange organizations and state and local public health agencies. These workers provide the support needed to train the health workers in the new processes and procedures to help them become efficient and meaningful users of that technology. Permanent support staff might include:

| Position                   | Workers in this role will:                                       | Past experience and anticipated                                 |
|----------------------------|--|---|
| Clinician leaders:         | • danalar atratagia ulara far                                    | training required:  |
| Clinician leaders:         | • develop strategic plans for clinical systems and               | Medical Health Service Manager or Informatics Nurse Specialists |
| Chief Medical Informatics/ | information management   | of informatics (varse opecialists                               |
| Information Officer (CMIO) | •align clinical system   | One year certificate or masters                                 |
|                            | capabilities with  | degree in informatics on top of                                 |
| Chief Nursing Informatics  | organizational needs   | licensed health care/public health                              |
| Officer (CNIO)             | •oversee IT governance   | professional status   |
|                            | • ensure that developments                                       |   |
|                            | are in line with global  |   |
|                            | trends in medicine, informatics and                              |   |
|                            | information technology   |   |
| Technical/software support | • interact with end users to                                     | Previous experience information                                 |
| staff                      | diagnose IT problems and   | technology or information                                       |
|                            | implement solutions  | management  |
|                            | •document IT problems  |   |
|                            | and evaluate the   | Six month certificate training for                              |
|                            | effectiveness of problem   | technical specialists   |
|                            | resolution   |   |
|                            | • support systems security                                       |   |
| Trainers                   | <ul><li>and standards</li><li>use a range of health IT</li></ul> | Experience as a health  |
| Trancis                    | applications, preferably at                                      | professional or health information                              |
|                            | an expert level  | management specialist.  |
|                            | •communicate both health   | Classroom experience as a trainer                               |
|                            | and IT concepts as   | in the classroom is also desired.                               |
|                            | appropriate  |   |
|                            | •assess training needs and                                       | Six month certificate program for                               |
|                            | competencies of learners   | health professionals or health                                  |
|                            | • design lesson plans,<br>structuring active learning            | information management specialists                              |
|                            | experiences for user   | specialists   |
|                            | • track training records of                                      |   |
|                            | the users and develop  |   |
|                            | learning plans for further                                       |   |
|                            | instruction  |   |
| Health Information         | •support the collection,   | Bachelors and masters degrees in                                |
| Management and Exchange    | management, retrieval,   | Health Information Management                                   |
| Specialists                | exchange, and/or analysis of information in electronic           | and related fields.   |
|                            | form, in health care and   |   |
|                            | public health organizations                                      |   |
| Health Information Privacy | •ensure the privacy and  | Bachelors or Masters degree in                                  |
| and Security Specialists   | security of health   | information science   |
|                            | information  |   |

#### **Health Care and Public Health Informaticians**

These individuals will be highly-trained and highly-specialized for academic faculty positions and research and development in various public, non-profit and for profit sectors of the health care industry. This workforce might include:

| Position                            | Workers in this role will:   | Past experience and anticipated training required:   |
|-------------------------------------|--|--|
| Research and development scientists | • support efforts to create innovative models and solutions that advance the capabilities of health IT • conduct studies on the effectiveness of health IT and its effect on health care quality                           | Doctoral degrees in informatics or masters degrees for health professionals  |
| Programmers and software engineers  | • be cross-trained in IT and health domains, thereby possessing a high level of familiarity with health domains to complement their technical skills in computer and information science                                   | Masters programs combining information/computer science and health domains   |
| Sub-specialists                     | •have a knowledge of IT, and deep knowledge drawn from disciplines (ethics, economics, business, policy and planning, cognitive psychology, and industrial/systems engineering) that inform health IT policy or technology | Masters or doctoral training in such fields as ethics, human factors, interfaces, cognitive psychology, industrial/systems engineering |

# **Education and Employment Resources**

## Training the Workforce through Community College Consortia

Over the past year the ONC provided funding to the **Community College Consortia** to develop or improve non-degree health IT training programs that can be completed in six

months or less. The ONC collaborated with the Department of Education to establish a technical assistance team that provided direction and support to the member institutions. The Consortia comprises five regional groups of more than 70 member community colleges in all 50 states. Each college developed the admission criteria for the certificate programs designed to train mid-level career professionals for Health-IT positions.

In late April 2011, HHS announced that 2,280 health information technology professionals graduated from community colleges with 3,000 graduates expected by the end of summer. These graduates represent a portion of the initial health IT workforce that will be trained through the HHS workforce development program this year. Many of the graduates have prior backgrounds in health care or information technology. They will be seeking employment with health providers to implement EHR systems in provider and hospital settings.

Workforce Boards and One-Stop Career Centers are encouraged to collaborate with these colleges around training opportunities and to develop strategies for assisting the graduates to find employment. Appendix C contains a complete listing of participating colleges with contact information.

#### **Health-IT Competency Exam**

Potential Health-IT workers will generally require additional training to compete for the openings on implementation and support teams. In April 2010, ONC awarded \$6 million in a two-year cooperative agreement to Northern Virginia Community College (NOVA) to develop health information technology (health IT) competency examinations for each of the positions on the implementation support team. These HIT Pro exams developed in partnership with Pearson Vu can be taken at 230 Pearson Professional Centers around the country. The competency exams were developed to confirm that an applicant has the experience and skills required to meet the nation's need for health information technology workers. For additional information visit the HIT Pro site at <a href="http://www.hitproexams.org/">http://www.hitproexams.org/</a>.

The ONC is using the colleges in the Community College Consortia to reach out to perspective students, but would also like to use state and local workforce agencies to access those individuals who are not enrolled in the Consortia program and have health care or IT backgrounds. The ONC has provided funds for 27,500 vouchers that enable individuals to take free exams. For more information about the availability of vouchers see

http://healthit.hhs.gov/portal/server.pt/community/healthit\_hhs\_gov\_competency\_exami\_nation\_program\_(2)/1809

#### **Employment Resources**

Potential sources for the graduate to seek employment include, but are not limited to: hospitals, community health centers, medical offices, regional extension centers, State

Offices of Rural Health (SOHR), vendors, managed service providers, and consulting firms.

The following resources might be consulted to enhance the customary job search techniques such as networking, job clubs, and Web searches.

|  | Resource   | Web link  |
|--|--|---|
| Niche Job Board                                      | HIMSS<br>JobMine                                     | http://onchitjobs.himss.org/home/index.cfm?site_id=12238  Post Jobs Search Job Listings Post Resumes  |
| Regional<br>Extension<br>Centers                     | RECs   | Contact List – Appendix B <a href="http://healthit.hhs.gov/portal/server.pt/community/healthit hhs gov rec program/1495">http://healthit.hhs.gov/portal/server.pt/community/healthit hhs gov rec program/1495</a> |
| Health Care<br>Services<br>Hospitals<br>Nursing Home | Employer<br>Locator                                  | http://www.acinet.org/employerlocator/employerlocator.asp?nodeid=18 Search by Industry Select Hospitals and Social Assistance Select a State Select Facility Type   |
| State Offices of<br>Rural Health                     | Directory of<br>State Offices<br>and<br>Associations | http://www.hrsa.gov/ruralhealth/about/directory/index.html  |
| EHR Product<br>Vendors                               | Certified<br>Health-IT<br>Product List               | http://onc-chpl.force.com/ehrcert Search for Vendors View vendor Web site for Career Opportunities  |
| Managed<br>Service<br>Providers                      | CompTIA  | http://www.comptia.org/membership/communities/healthcareIT.aspx   |

#### **Career Exploration**

There are numerous career information and exploration Web sites, but there are two that were created with IT in mind.

Health Information Careers developed by the Healthcare Information and Management Systems Society (HIMSS) is a resource to assist current Health-IT professionals to learn, grow, and advance in their careers. See <a href="http://www.himss.org/ASP/CareerServicesHome.asp">http://www.himss.org/ASP/CareerServicesHome.asp</a>

Health Information Careers developed by the American Health Information Management Association (AHIMA) is a resource for health information professionals to learn how to use their knowledge of information technology and records management to form the link between clinicians, administrators, technology designers, and information technology professionals. See <a href="http://www.hicareers.com/">http://www.hicareers.com/</a>

#### **Appendix A: Key Definitions**

#### **Electronic Health Record (EHR)**

Health IT includes the use of electronic health records (EHRs) instead of paper medical records to maintain people's health information. The widespread use of a system of electronic health records (EHR) will provide access to a patient's total health information supporting better health care decisions, and more coordinated care. A portable EHR makes a patient's health information available when and where it is needed.

Electronic Health Records (EHRs) are longitudinal electronic records of patient health information generated by one or more encounters in any care delivery setting. Included in this information are patient demographics, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data and radiology reports. The EHR automates and streamlines the clinician's workflow because it generates a complete record of a clinical patient encounter. EHRs can also support the collection of data for uses other than clinical care, such as billing, quality management, outcome reporting, public health disease surveillance and reporting.<sup>1</sup>

EHRs can support better follow-up information for patients – for example, after a clinical visit or hospital stay, instructions and information can be effortlessly provided to the patient and reminders for other follow-up care can be sent easily or even automatically to the patient. EHRs can improve patient and provider convenience – patients can have their prescriptions ordered and ready even before they leave the provider's office, and insurance claims can be filed immediately from the provider's office.

Electronic Health Record Technology is defined for the purposes of the Medicare and Medicaid Incentive Programs. The software technology must offer the necessary technological capability, functionality, and security to meet the *meaningful use* criteria.

#### **Electronic Medical Record (EMR)**

Sometimes people use the terms "Electronic Medical Record" or "EMR" when talking about Electronic Health Record (EHR) technology. Very often an Electronic Medical Record or EMR is just another way to describe an Electronic Health Record or EHR. Health providers and software or application vendors sometimes use the terms interchangeably.

There is, however, a distinction between EMR and EHR. The EMR can be thought of as the recording of patient information and medical findings in an electronic format. In plain terms it is an electronic version of a patient's chart maintained by medical professionals or treatment facilities. The EMR is specific to and generally the property of the provider. There are numerous software applications available for EMR. EHR technology products and systems are secure, can maintain data confidentially, and can work with other systems to share information. It is the requirement that EHRs have the capability to share information with other systems that separates them from EMRs.

#### Personal Health Records (PHR)

In addition to EMRs and EHRs, you may come across the term Personal Health Record, or PHR. A Personal Health Record (PHR) is an electronic record of health information maintained by the patient. A PHR might contain information about medical conditions, allergies, medications, and doctor or hospital visits. The PHR makes it possible for the patient to store in one place and share information with others as needed. The patient controls how the information is used and who can access it.

PHRs are usually accessed through the Internet so information is available anytime or anywhere. See <a href="http://www.medicare.gov/navigation/manage-your-health/personal-health-records-overview.aspx">http://www.medicare.gov/navigation/manage-your-health/personal-health-records-overview.aspx</a>

# Appendix B: Health Information Technology Regional Extension Centers (HITRECS) Contacts

|   | Email  |
|---|--|
|   |  |
| Alaska eHealth Networkr   | rebecca@ak-ehealth.org   |
| Alabama Regional Extension Center   | info@al-rec.org  |
| HIT Arkansas  | ifuchs@afmc.org  |
| Hawaii-Pacific (HI, GM, AS, CNMI) REC   | aito@hawaiihie.org   |
| Arizona Health-e Connection (AzHeC)   | melissa.rutala@azhec.org   |
| CalHIPSO (North)  | info@calhipso.org  |
| CalHIPSO (South)  | info@calhipso.org  |
| CalOptima Foundation  | emoscaritolo@caloptima.org   |
| HITEC-LA  | HITEC-LA@lacare.org  |
| Hawaii-Pacific (HI, GM, AS, CNMI) REC   | aito@hawaiihie.org   |
| Colorado Regional Extension Center (CORHIO)   | palbritton@corhio.org  |
| eHealth Connecticut   | scleary@gosmacpartners.com   |
| eHealth DC  | info@ehealthdc.org   |
| Quality Insights of Delaware  | bschindele@wvmi.org  |
| Center for the Advancement of Health IT (Rural and North Florida Regional Extension Center) | info@AdvanceHealthIT.org   |
| South Florida Regional Extension Center<br>Collaborative                                    | info@southfloridarec.org   |
| PaperFree Florida   | <u>iwolfson@hsc.usf.edu</u>  |
| Central Florida REC   | info@ucf-rec.org   |
| Georgia HITREC  | dmack@msm.edu  |
| Hawaii-Pacific (HI, GM, AS, CNMI) REC   | aito@hawaiihie.org   |
| Hawaii-Pacific (HI, GM, AS, CNMI) REC   | aito@hawaiihie.org   |
| Health Information Technology Regional Extension Center (Iowa HITREC)                       | lowaHITREC@ifmc.org  |
| Washington & Idaho Regional Extension Center(WIREC)   | peggye@qualishealth.org  |
| Chicago Health Information Technology Regional<br>Extension Center (CHITREC)                | info@chitrec.org   |
| Illinois Health Information Technology Regional<br>Extension Center (IL-HITREC)             | info@ilhitrec.org  |
| HealthBridge Tri-State (IN, KY, OH) REC   | dgroves@healthbridge.org   |
| Purdue University   | marrowsm@purdue.edu  |
| Kansas Foundation for Medical Care, Inc. (KFMC)   | recsupport@kfmc.org  |
| HealthBridge Tri-State (IN, KY, OH) REC   | dgroves@healthbridge.org   |
| University of Kentucky Research Foundation  | kyrec@uky.edu  |
| Louisiana Health Care Quality Forum   | bikerd@lhcqf.org   |
|   | rodenstein@masstech.org  |
| <u> </u>  | Alabama Regional Extension Center HIT Arkansas Hawaii-Pacific (HI, GM, AS, CNMI) REC Arizona Health-e Connection (AzHeC) CalHIPSO (North) CalOptima Foundation HITEC-LA Hawaii-Pacific (HI, GM, AS, CNMI) REC Colorado Regional Extension Center (CORHIO) eHealth Connecticut eHealth DC Quality Insights of Delaware Center for the Advancement of Health IT (Rural and North Florida Regional Extension Center)  South Florida Regional Extension Center Collaborative PaperFree Florida Central Florida REC Georgia HITREC Hawaii-Pacific (HI, GM, AS, CNMI) REC Health Information Technology Regional Extension Center (Iowa HITREC) Washington & Idaho Regional Extension Center(WIREC) Chicago Health Information Technology Regional Extension Center (CHITREC) Illinois Health Information Technology Regional Extension Center (IL-HITREC) HealthBridge Tri-State (IN, KY, OH) REC Purdue University Kansas Foundation for Medical Care, Inc. (KFMC) HealthBridge Tri-State (IN, KY, OH) REC |

| NAD | Character Basis and Information Costons for Con-  |                                     |
|-----|---|-------------------------------------|
| MD  | Chesapeake Regional Information System for Our Patients                                     | info@crisphealth.org                |
| ME  | HealthInfoNet   | info@hinfonet.org                   |
| MI  | Michigan Center for Effective IT Adoption (M-CEITA)   | mceita.info@altarum.org             |
| MN  | Regional Extension Assistance Center for Health<br>Information Technology (REACH)           | info@khaREACH.org                   |
| МО  | Missouri HIT Assistance Center  | EHRhelp@missouri.edu                |
| MS  | Mississippi Regional Extension Center   | rbordelon@eqhs.org                  |
| MT  | Mountain-Pacific Quality Health Foundation (MPQHF)  | kurbanek@mpqhf.org                  |
| NC  | University of North Carolina AHEC REC   | tom_bacon@med.unc.edu               |
| ND  | Regional Extension Assistance Center for Health Information Technology (REACH)              | info@khaREACH.org                   |
| NE  | Wide River Technology Extension Center  | info@widerivertec.org               |
| NH  | Regional Extension Center of New Hampshire  | imonahan@maehc.org                  |
| NJ  | New Jersey Institute of Technology (NJIT)   | info@njhitec.org                    |
| NM  | Lovelace Clinic Foundation-LCF Research   | Lyndi.Dittmer-Perry@LCFResearch.org |
| NV  | HealthInsight   | sdonnelly@healthinsight.org         |
| NY  | New York eHealth Collaborative (NYeC)   | pwilder@nyehealth.org               |
| NY  | NYC REACH   | aparsons@health.nyc.gov             |
| ОН  | HealthBridge Tri-State (IN, KY,OH) REC  | dgroves@healthbridge.org            |
| ОН  | Ohio Health Information Partnership (OHIP)  | info@OHIPonline.org                 |
| ОК  | Oklahoma Foundation for Medical Quality, Inc. (OFMQ)  | Dgolder@ofmq.com                    |
| OR  | Oregon's Health Information Technology Extension Center (O-HITEC)                           | info@ohitec.org                     |
| PA  | Quality Insights of Pennsylvania (Eastern)  | asomplasky@wvmi.org                 |
| PA  | Quality Insights of Pennsylvania (Western)  | asomplasky@wvmi.org                 |
| PR  | Ponce School of Medicine  | igarcia@psm.edu                     |
| RI  | Rhode Island Quality Institute (RIQI)   | info@riqi.org                       |
| sc  | Center for Information Technology Implementation<br>Assistance in South Carolina (CITIA-SC) | thornbur@mailbox.sc.edu             |
| SD  | healthPOINT   | amy.townsend@dsu.edu                |
| TN  | Qsource   | imcanally@gsource.org               |
| TX  | North Texas Regional Extension Center   | info@ntrec.org                      |
| TX  | West Texas Health Information Technology<br>Regional Extension Center (WT-HITREC)           | info@wtxhitrec.org                  |
| TX  | CentrEast Regional Extension Center   | tduke@tamhsc.edu                    |
| TX  | Gulf Coast Regional Extension Center  | pamela.d.slayer@uth.tmc.edu         |
| UT  | HealthInsight   | sdonnelly@healthinsight.org         |
| VA  | VHQC (Virginia Health Quality Center)   | lfisher@vhqc.org                    |
| VT  | Vermont Information Technology Leaders, Inc.  | pforlenza@vitl.net                  |
| WA  | Washington & Idaho Regional Extension Center(WIREC)   | peggye@qualishealth.org             |
|     |   |                                     |

| WI   | Wisconsin Health Information Technology<br>Extension Center | jwang@metastar.com            |
|------|---|-------------------------------|
| wv   | West Virginia Health Improvement Institute, Inc.            | cstandre@spreadinnovation.com |
| WY   | Mountain-Pacific Quality Health Foundation (MPQHF)          | kurbanek@mpqhf.org            |
| NIHB | National Indian Health Board (NIHB)                         | tkauley@nihb.org              |

# Appendix C: Health and Human Services Office of the National Coordinator (HHS ONC) Community College Consortia

| School                                      | City           | State        |  |
|---|----------------|--------------|--|
| Region A Lead: Bellevue Community College   |                |              |  |
| Bellevue College                            | Bellevue       | Washington   |  |
| Dakota State University                     | Madison        | South Dakota |  |
| Lake Region State College                   | Devil's Lake   | North Dakota |  |
| Montana Tech                                | Butte          | Montana      |  |
| North Idaho College                         | Coeur d'Alene  | Idaho        |  |
| Portland Community College                  | Portland       | Oregon       |  |
| Pueblo Community College                    | Pueblo         | Colorado     |  |
| Salt Lake Community College                 | Salt Lake City | Utah         |  |
| Region B Lead: Los Rios Community College D | <u>istrict</u> |              |  |
| Butte College                               | Oroville       | California   |  |
| College of Southern Nevada                  | Las Vegas      | Nevada       |  |
| Cosumnes River College                      | Sacramento     | California   |  |
| East LA College                             | Monterey Park  | California   |  |
| Fresno City College                         | Fresno         | California   |  |
| Los Rios Community College District         | Sacramento     | California   |  |
| Maricopa College                            | Phoenix        | Arizona      |  |
| Mission College                             | Santa Clara    | California   |  |
| Orange Coast College                        | Costa Mesa     | California   |  |
| Pima College                                | Tucson         | Arizona      |  |
| San Diego Mesa College                      | San Diego      | California   |  |
| Santa Barbara City College                  | Santa Barbara  | California   |  |
| Santa Monica College                        | Santa Monica   | California   |  |

| University of Hawaii College - Kapiolani           | Honolulu          | Hawaii         |  |  |
|--|-------------------|----------------|--|--|
| Region C Lead: Cuyahoga Community College District |                   |                |  |  |
| Cincinnati State Technical & Community College     | Cincinnati        | Ohio           |  |  |
| Columbus State Community College                   | Columbus          | Ohio           |  |  |
| Cuyahoga Community College                         | Cleveland         | Ohio           |  |  |
| Delta College                                      | University Center | Michigan       |  |  |
| Des Moines Area Community College                  | Ankeny            | lowa           |  |  |
| Johnson County Community College                   | Overland Park     | Kansas         |  |  |
| Kirkwood Community College                         | Cedar Rapids      | Iowa           |  |  |
| Lansing Community College                          | Lansing           | Michigan       |  |  |
| Macomb Community College                           | Warren            | Michigan       |  |  |
| Madison Area Technical College                     | Madison           | Wisconsin      |  |  |
| Metropolitan Community College                     | Omaha             | Nebraska       |  |  |
| Milwaukee Area Technical College                   | Milwaukee         | Wisconsin      |  |  |
| Moraine Valley Community College                   | Palos Hills       | Illinois       |  |  |
| Normandale Community College                       | Bloomington       | Minnesota      |  |  |
| Sinclair Community College                         | Dayton            | Ohio           |  |  |
| St. Louis Community College                        | St. Louis         | Missouri       |  |  |
| Region D Lead: Pitt Community College              |                   |                |  |  |
| Atlanta Technical College                          | Atlanta           | Georgia        |  |  |
| Broward College                                    | Coconut Creek     | Florida        |  |  |
| Catawba Valley Community                           | Hickory           | North Carolina |  |  |
| Central Piedmont Community College                 | Charlotte         | North Carolina |  |  |
| Chattanooga State Community College                | Chattanooga       | Tennessee      |  |  |
| Dallas County Community College District           | Dallas            | Texas          |  |  |

| Delgado Community College                  | New Orleans    | Louisiana            |
|--|----------------|----------------------|
| Dyersburg State Community College          | Dyersburg      | Tennessee            |
| Florence/Darlington Technical College      | Florence       | South Carolina       |
| Hinds Community College                    | Raymond        | Mississippi          |
| Houston Community College                  | Houston        | Texas                |
| Indian River State College                 | Ft. Pierce     | Florida              |
| Itawamba Community College                 | Tupelo         | Mississippi          |
| Jefferson Community & Technical College    | Louisville     | Kentucky             |
| Midland College                            | Midland        | Texas                |
| National Park Community College            | Hot Springs    | Arkansas             |
| Pitt Community College                     | Winterville    | North Carolina       |
| Santa Fe College                           | Gainesville    | Florida              |
| Tulsa Community College                    | Tulsa          | Oklahoma             |
| Walters State Community College            | Morristown     | Tennessee            |
| Region E Lead: Tidewater Community College |                |                      |
| Bristol Community College                  | Fall River     | Massachusetts        |
| Bronx Community College                    | Bronx          | New York             |
| Brookdale Community College                | Lincroft       | New Jersey           |
| Burlington Community College               | Pemberton      | New Jersey           |
| Camden County College                      | Blackwood      | New Jersey           |
| Capital Community College                  | Hartford       | Connecticut          |
| Community College of Allegheny County      | Pittsburgh     | Pennsylvania         |
| Community College of Baltimore County      | Baltimore City | Maryland             |
| Community College of DC                    | Washington     | District of Columbia |
| Community College of Vermont               | Waterbury      | Vermont              |

| Essex County College                     | Newark         | New Jersey    |
|--|----------------|---------------|
| Gloucester County College                | Sewall         | New Jersey    |
| Kennebec Valley Community College        | Fairfield      | Maine         |
| Northern Virginia Community College      | Annandale      | Virginia      |
| Ocean County College                     | Toms River     | New Jersey    |
| Passaic County Community College         | Paterson       | New Jersey    |
| Raritan Valley Community College         | Branchburg     | New Jersey    |
| Southern Maine Community College         | South Portland | Maine         |
| Suffolk County Community College         | Brentwood      | New York      |
| Tidewater Community College              | Virginia Beach | Virginia      |
| West Virginia Northern Community College | Wheeling       | West Virginia |
| Westchester Community College            | Valhalla       | New York      |

## For additional information:

http://healthit.hhs.gov/portal/server.pt/community/healthit\_hhs\_gov\_community\_college\_program/1804