



## THE HIT WORKFORCE SHORTAGE An Alliance for Health Reform Toolkit

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#### **Key Facts:**

- 67 percent of hospitals report shortages of health information technology (HIT) staffing.<sup>i</sup>
- While cost is still a major problem, hospital executives report that lack of staff is now a bigger barrier to implementing HIT.<sup>ii iii</sup>
- Hospitals indicate they need staff in the areas of clinical software implementation and support,<sup>iv</sup> and health information professionals say they need clinical application support, network/architecture support and clinical informatics.<sup>v</sup>
- The federal government made \$19.2 billion available to physicians and hospitals in 2009 under the Health Information Technology for Economic and Clinical Health Act to help them set up electronic health records (EHRs).<sup>vi</sup>
- The Bureau of Labor Statistics predicts a 21 percent increase in the employment of medical records and health information technologists between 2010 and 2020.<sup>vii</sup>
- A 38 percent increase in workforce is needed to achieve sufficient levels of HIT professionals.<sup>viii</sup>
- The Health IT Workforce Development Program is intended to create a larger HIT workforce, and has trained 12,000 professionals in six-month community college courses since 2010.<sup>ix</sup>

#### **Background**

Health care providers are scrambling to find their way in the fast-paced world of technology, and the federal government is making billions of dollars available to help them do it. But while

cost has traditionally been the big hurdle, the lack of a qualified workforce now poses a significant barrier, according to major surveys.

Sixty-seven percent of hospital executives reported that they were experiencing a shortage of health information technology (HIT) staff in a September survey by the College of Healthcare Information Management Executives (CHIME).<sup>x</sup>

Health care providers are moving quickly to adopt electronic health records (EHRs). According to the Centers for Disease Control and Prevention, 55 percent of physicians adopted systems in 2011.<sup>xi</sup> And, according to the Office of the National Coordinator for Health Information Technology, 34.8 percent of non-federal acute care hospitals adopted a basic electronic health record system that year.<sup>xii</sup>

Providers also are participating in electronic prescribing, personal health records, remote monitoring, secure messaging, and telehealth (the delivery of health services or health information using telecommunications).<sup>xiii</sup> Proponents of HIT claim that it will create health care savings, improve efficiency, increase patient safety, and improve health benefits.<sup>xiv</sup> However, some point to a lack of uniformity in HIT standards, high implementation costs, and concerns about security and privacy.<sup>xv</sup>

The American Recovery and Reinvestment Act (ARRA), signed in 2009, has various funding opportunities for HIT. Through the Health Information Technology for Economic and Clinical Health Act (HITECH), it allotted about \$19.2 billion to several federal agencies to expand and improve the various tools used in HIT.<sup>xvi</sup> Additionally, the Patient Protection and Affordable Care Act (ACA), signed in 2010, directly addressed implementation of electronic health records.

In order to manage these various technological systems, a trained workforce is required. A competent HIT education can include disciplines such as information technology as well as health care, business and management.<sup>xvii</sup> With health IT professionals playing a critical part in helping providers implement EHRs, the Office of the National Coordinator of Health IT convened a panel of experts to identify core HIT competency workforce roles. The panel identified six specific workforce roles, including; a clinical or practitioner consultant, implementation manager, implementation support specialist, information management redesign specialist, technical support and software support staff, and trainer. The responsibilities of these roles range from assisting providers with reorganizing their work so they can best optimize HIT features to designing and delivering training programs to employees in clinical and public health settings. One person may fulfill multiple roles where resources are limited or these roles can be shared across several providers.<sup>[xvii]</sup>

The U.S. Bureau of Labor Statistics predicts that the number of professionals entering these careers will substantially increase. In the current healthcare infrastructure, there is a workforce deficit. In order to reach sufficient present levels, the HIT workforce has to increase by 41,000 workers, a 38 percent increase over the current number of 108,000 workers.<sup>xviii</sup>

The ideal education for the HIT workforce is a topic that is still widely debated. However, recent studies have valued biomedical and health informatics.<sup>xix</sup>

The next generation of doctors is also becoming familiar with utilizing EHRs; however, many medical schools are grappling with how to train students to use new systems. According to the AMA, roughly 64 percent of the nation's medical schools allow students to use EHRs.<sup>xx</sup> Although many medical schools face challenges with integrating EHRs into their curricula, such as billing issues,<sup>xxi</sup> the amount of hands on experience students have with EHRs is a critical component to the success of the Health IT workforce.

The Office of the National Coordinator for Health Information Technology (ONC) has developed the Health IT Workforce Development Program in order to address the workforce shortage. The ONC has split \$116 million between four programs:<sup>xxii</sup>

- Community College Consortia to Educate Health Information Technology Professionals: Uses 82 community colleges in all 50 states to train HIT professionals in six months or less, and has trained more than 12,000 professionals since September of 2010.
- Program of Assistance for University-Based Training: Developed to increase the amount of available HIT professionals for jobs requiring university training.
- Curriculum Development Centers: Five universities received \$10 million in funding to develop materials for the curricula used in the Community College Consortia.
- Competency Examination Program: Designed to develop competency exams for use in HIT professional training programs.

## **REPORTS AND ARTICLES TO NOTE**

### **The Staff Gap**

#### **Healthcare CIOs Fear IT Staffing Shortages will Affect EHR Implementations and Other Projects**

*CHIME*, October 6, 2012

[http://www.cio-chime.org/chime/press/surveys/pdf/Staffing\\_Survey\\_10\\_1\\_2010.pdf](http://www.cio-chime.org/chime/press/surveys/pdf/Staffing_Survey_10_1_2010.pdf)

This survey, released by CHIME in 2010, was given to 182 health care CIOs, and shows that there is an IT staff shortage at medical facilities. More than 70 percent of respondents reported that their organizations do not have enough staff to implement clinical applications. These staffing shortages cause concern among CIOs, as they fear that this will negatively impact projects and chances to implement EHRs successfully.

#### **Demand Persists for Experienced Health IT Staff**

CHIME, September 26, 2012

[http://www.ciochime.org/chime/press/surveys/pdf/CHIME\\_Workforce%20\\_survey\\_report.pdf](http://www.ciochime.org/chime/press/surveys/pdf/CHIME_Workforce%20_survey_report.pdf)

In a 2012 survey of 163 members of the College of Healthcare Information Management Executives 74 percent of respondents reported that their organizations do not have enough staff to implement clinical applications. That compares to 70 percent who gave that response in 2010. The survey also found that, while most Healthcare CIOs knew about the training programs through the Health IT Workforce Development Program, only 12 percent reported hiring its graduates.

### **BLS report for Health information technologists**

*Bureau of Labor Statistics*, August 7, 2012

<http://www.bls.gov/ooh/healthcare/medical-records-and-health-information-technicians.htm#tab-1>

The Bureau of Labor Statistics predicts an increase in demand for medical records and health information technologists of 21 percent from 2010 to 2020.

### **2012 HIMSS Survey: IT Staffing Shortage Key Barrier to Meeting IT Priorities**

*Healthcare IT News*, February 21, 2012

<http://www.healthcareitnews.com/news/2012-himss-leadership-survey-it-staffing-shortage-key-barrier-meeting-it-priorities>

The most significant barrier to implementing HIT, according to the 2012 HIMSS Leadership Survey, is lack of staffing. “Underlying the need for staffing resources is the continued focus on meeting federal initiatives.” The article lists other priorities among the executive level respondents. Thirty-eight percent indicated that achieving federal meaningful use requirements was a top priority for the next two years.

### **2012 HIMSS Leadership Survey: Senior IT Executive Results**

*Healthcare Information and Management Systems Society*, February 21, 2012

<http://www.himss.org/content/files/2012FINAL%20Leadership%20Survey%20with%20Cover.pdf>

“Considered to be a key barrier in addressing their IT priorities, approximately two-thirds of the respondents indicated they plan to increase their IT staff in the next year. The leading areas in which respondents need staff are in the areas of clinical application support, network/architecture support and clinical informatics professionals.”

### **Junior consultants take edge off HIT staff shortage**

*Healthcare IT News*, Diana Manos, August 3, 2012

<http://www.healthcareitnews.com/news/junior-consultants-take-edge-hit-staff-shortage>

This article discusses a model for alleviating the staff shortage by putting more junior consultants into the field. HIT consultants tend to be older, and senior consultants cost a hospital 35 percent more than junior consultants.

### **Deltek: In wake of court ruling, look to states for health IT opportunities**

*The Washington Post*, Amanda White and Lauren Jones, July 15, 2012

[http://www.washingtonpost.com/business/capitalbusiness/deltek-look-to-the-states-for-health-it-opportunities/2012/07/13/gJQATOXtmW\\_story.html](http://www.washingtonpost.com/business/capitalbusiness/deltek-look-to-the-states-for-health-it-opportunities/2012/07/13/gJQATOXtmW_story.html)

This article examines the need for HIT vendors in the state Health Information Exchanges.

### **Texas Health Information Technology Employer Needs Assessment Report**

*Texas State University-San Marcos*, Susan H. Fenton, February 3, 2012

[http://www.health.txstate.edu/him/TxHIT-workforce/news/contentParagraph/03/document/TexasHITEmployerNeedsAssessment\\_RELEASSED\\_03302012.pdf](http://www.health.txstate.edu/him/TxHIT-workforce/news/contentParagraph/03/document/TexasHITEmployerNeedsAssessment_RELEASSED_03302012.pdf)

A study by Texas State University-San Marcos' department of health information management found that previous estimates of HIT worker needs to be inaccurate. It found that Texas will need 6,500 more health IT workers than previously estimated, and 10,000 more by 2013. Overcoming this workforce gap will require the efforts of many different sectors, such as employers, educational providers and public organizations.

## **Training the Workforce**

### **Program for Assistance for University-Based Training**

*The Office of the National Coordinator for Health Information Technology*, May 2011

<http://healthit.hhs.gov/portal/server.pt?open=512&objID=1808&mode=2>

This website lists colleges and universities that are establishing and/or have established university-level IT training programs that include a HIT sub-specialty.

### **Preparing Skilled Professionals for a Career in Health IT**

*The Office of the National Coordinator for Health Information Technology*, March 2012

<http://dashboard.healthit.gov/college/>

This interactive map shows the “Community College Consortia to Educate Health IT Professionals in Health Care Program.” This program is one part of a larger “Office of National Coordinators HIT Workforce Development Program” which also includes programs for University-based training, curriculum development centers, and competency examination

programs.

### **Workforce Development Program**

<http://www.healthit.gov/policy-researchers-implementers/workforce-development-program>

“The Workforce Development Program, funded under the Office of the National Coordinator, aims to train HIT professionals to help providers implement EHRs and achieve meaningful use. This website provides more information on four initiatives that make up this program, including; [Community College Consortia](#), [Curriculum Development Centers](#), [Competency Exam Program](#), and [University-Based Training](#).”

### **Community college training of HIT professionals questioned**

*Healthcare IT News*, Diana Manos, January 10, 2012

<http://www.healthcareitnews.com/news/community-college-training-hit-professionals-questioned>

With funding from the American Recovery and Reinvestment Act, the ONC has created the Community College Consortia to Educate Health IT Professionals in Health Care Program, which is a part of a larger program by the ONC, known as the Health IT Workforce Development Program. This is all part of an effort to develop and educate a workforce with expertise on health information technology. Since the Community College Consortia has only recently been implemented, its long-term benefits are unclear.

### **Don't discount applicants during health IT talent shortage**

*Fierce Health IT*, Susan D. Hall, July 23, 2012

[http://www.fiercehealthit.com/story/dont-discount-applicants-during-health-it-talent-shortage/2012-07-23?utm\\_campaign=twitter-Share-NL](http://www.fiercehealthit.com/story/dont-discount-applicants-during-health-it-talent-shortage/2012-07-23?utm_campaign=twitter-Share-NL)

Despite high national unemployment and despite abundant HIT employment opportunities, the HIT industry faces a workforce shortage. Though legitimate training is necessary to fill HIT job vacancies, some assert that employers are too strict with their applicant recruitment stipulations.

### **Strategies to Address the Health Care Information Technology Workforce Shortage**

*KPMG*, September 28, 2011

[http://www.healthcouncil.com/Libraries/Collateral\\_Materials/HIT\\_Workforce\\_Shortage\\_FINAL.sflb.ashx](http://www.healthcouncil.com/Libraries/Collateral_Materials/HIT_Workforce_Shortage_FINAL.sflb.ashx)

“This article aims to define the Health Care Information Technology (HIT) sector, quantify the current workforce shortage, outline its contributing factors, and provide strategies that local economies can use to address the shortage. These strategies are anticipated to not only

improve local economic development but also improve the efficiency and effectiveness of health care delivered in the immediate community and beyond.”

**Issue Brief: How the HITECH Act is Helping Generate Jobs in Health Information Technology**

*eHealth Initiative*, February 7, 2012

<http://www.ehealthinitiative.org/resources/view.download/54/210.html>

This is a summary of a health information exchange (HIE) survey that the eHealth Initiative conducted in 2011 that included questions about the HIT workforce, hiring practices and employment gaps.

**Are Med Students Getting EHR Training?**

*Government Health IT*, Jeff Rowe, August 14, 2012

<http://www.govhealthit.com/blog/are-med-students-getting-ehr-training>

This article goes beyond EHR training for support staff and discusses the importance of exposing medical students to EHRs, by integrating EHRs into curricula. The article briefly discusses the multiple challenges that schools face when trying to integrate EHRs into their curricula, such as billing issues.

**SELECTED EXPERTS**

**Analysts and Advocates**

Maureen Bisognano	<i>Institute for Healthcare Improvement</i>	617/301-4800
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### **Government and Related Groups**

Jonathan Blum	<i>Centers for Medicare and Medicaid Services</i>	410/786-3871
Carolyn Clancy	<i>Agency for Healthcare Research and Quality</i>	301/427-1200
Dan Crippen	<i>National Governors Association</i>	202/624-5336
Joshua Goldberg	<i>National Association of Insurance Commissioners</i>	202/471-3984
Cindy Mann	<i>Centers for Medicare and Medicaid Services</i>	410/786-3871
Stacey Mazer	<i>National Association of State Budget Officers</i>	202/624-8431
Aaron McKethan	<i>Office of the National Coordinator for HIT</i>	202/690-7151
Valerie Melvin	<i>Government Accountability Office</i>	202/512-6304
Todd Park	<i>Office of Science and Technology Policy</i>	202/456-4444
Joy Pritts	<i>Office of the National Coordinator</i>	202/690-7151
Joy Johnson Wilson	<i>National Conference of State Legislatures</i>	202/624-5400

### **Stakeholders**

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Brenda Craine	<i>American Medical Association</i>	202/789-7447
Linda Fishman	<i>American Hospital Association</i>	202/626-4628
Alissa Fox	<i>Blue Cross Blue Shield Association</i>	202/626-8681
Mary Grealy	<i>Healthcare Leadership Council</i>	202/452-8700
Daniel Hawkins	<i>National Association of Community Health Centers</i>	202/296-3800
Xiaoyi Huang	<i>National Association of Public Hospitals</i>	202/ 585-0100
Karen Ignagni	<i>America's Health Insurance Plans</i>	202/778-3200
Charles Kahn	<i>Federation of American Hospitals</i>	202/624-1500
Mary Kennedy	<i>Association for Community Affiliated Plans</i>	202/701-4749

### **Websites**

Alliance for Health Reform	<a href="http://www.allhealth.org">www.allhealth.org</a>
Agency for Healthcare Research and Quality	<a href="http://www.ahrq.gov">www.ahrq.gov</a>



American Enterprise Institute	<a href="http://www.aei.org">www.aei.org</a>
American Health Information Management Association	<a href="http://www.ahima.org">www.ahima.org</a>
American Hospital Association	<a href="http://www.aha.org">www.aha.org</a>
American Medical Association	<a href="http://www.ama.org">www.ama.org</a>
California HealthCare Foundation	<a href="http://www.chcf.org">www.chcf.org</a>
Centene Corporation	<a href="http://www.centene.com">www.centene.com</a>
Center for Studying Health System Change	<a href="http://www.hschange.com">www.hschange.com</a>
Centers for Medicare & Medicaid Services	<a href="http://www.cms.hhs.gov">www.cms.hhs.gov</a>
College of Healthcare Information Management Executives	<a href="http://www.cio-chime.org">www.cio-chime.org</a>
The Commonwealth Fund	<a href="http://www.commonwealthfund.org">www.commonwealthfund.org</a>
Congressional Budget Office	<a href="http://www.cbo.gov">www.cbo.gov</a>
eHealth Initiative	<a href="http://www.ehealthinitiative.org">www.ehealthinitiative.org</a>
Families USA	<a href="http://www.familiesusa.org">www.familiesusa.org</a>
Galen Institute	<a href="http://www.galen.org">www.galen.org</a>
Health IT Now!	<a href="http://www.healthitnow.org">www.healthitnow.org</a>
Health Resources and Services Administration	<a href="http://www.hrsa.gov">www.hrsa.gov</a>
The Heritage Foundation	<a href="http://www.heritage.org">www.heritage.org</a>
Healthcare Information and Management Systems Society	<a href="http://www.himss.org">www.himss.org</a>
Kaiser Family Foundation	<a href="http://www.kff.org">www.kff.org</a>
National Association of Community Health Centers	<a href="http://www.nachc.org">www.nachc.org</a>
National Academy for State Health Policy	<a href="http://www.nashp.org">www.nashp.org</a>
National Association of State Budget Officers	<a href="http://www.nasbo.org">www.nasbo.org</a>
National Governors Association	<a href="http://www.nga.org">www.nga.org</a>
National Institute for Health Care Reform	<a href="http://www.nihcr.org">www.nihcr.org</a>
Office of the Inspector General	<a href="http://www.oig.hhs.gov">www.oig.hhs.gov</a>
Office of the National Coordinator for HIT	<a href="http://www.healthit.hhs.gov">www.healthit.hhs.gov</a>
Patient Privacy Rights	<a href="http://www.patientprivacyrights.org">www.patientprivacyrights.org</a>
The Robert Wood Johnson Foundation	<a href="http://www.rwjf.org">www.rwjf.org</a>
Urban Institute	<a href="http://www.urban.org">www.urban.org</a>

## Endnotes

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<sup>ii</sup> Wilkinson, Kelly. “Are Federal Training Programs Meeting the Growing Need for a New Health IT Workforce?” *iHealthBeat*. March 21, 2012; available at

[http://origin.eastbaymedia.com/~advisoryboard/podcast\\_media/iHBSpecialReportTranscript032112.pdf](http://origin.eastbaymedia.com/~advisoryboard/podcast_media/iHBSpecialReportTranscript032112.pdf)

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<sup>iv</sup> “Healthcare CIOs Fear IT Staffing Shortages will Affect EHR Implementations and Other Projects,” College of Healthcare Information Management Executives, Ann Arbor, Michigan, September, 26, 2012; available at [http://www.cio-chime.org/chime/press/surveys/pdf/Staffing\\_Survey\\_10\\_1\\_2010.pdf](http://www.cio-chime.org/chime/press/surveys/pdf/Staffing_Survey_10_1_2010.pdf)

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