

# The Coming Shortage in Health IT Personnel

A White Paper by:

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While most of the workforce in the United States faces double-digit unemployment during these uncertain economic times, the health care industry is facing severe shortages in the health information technology field. Such a shortage, if not corrected, will affect the ways in which some of the new programs in the health care field will be launched this year. In the midst of the federal push to encourage the adoption of the electronic health record (EHR) and other information technologies, there is a crucial element missing: a staff of health information technology personnel to implement such technology. In fact, over the next five years, hospitals and clinical practices will face a triple whammy of major IT changes that will produce acute shortages of skilled IT workers. These changes include:

- Tightened HIPPA data security requirements, some of which will take effect this year;
- The transition to ICD-10 coding and related transaction standards, currently slated for October, 2013;
- Stimulus incentives for the meaningful use of electronic health records.

Under the CMS EHR Incentive Programs payments will be made to those hospitals and eligible professionals that implement certified electronic health records and demonstrate meaningful use; this will transition to penalties for those that fail to comply in 2015. And, yet, according to the Department of Health & Human Services of the National Coordinator for Health Information Technology, some 80 percent of clinical practices and hospitals have not yet begun to use the electronic health records, even at a basic level. This could mean only one thing: most of the clinical practices and hospitals have not yet calculated how many health information technology personnel will be needed to implement the EHR, the health information exchanges, and other health information technology tools of the trade. So, who is going to run your IT?

Evidence of a Health Information Technology (HIT) workforce shortage is coming from at least two sources. The first source is published projections. For example, a 2008 Bureau of Labor Statistics report projected the need for an additional 35,000 HIT workers by the year 2018. A 2008 analysis of the HIMSS Analytics database estimated that U.S. hospitals will require an additional 40,000 HIT workers to meet HIMSS EMR Adoption Model, Stage 4. And, finally, the ONC estimates that hospitals and physician practices will need an additional 50,000 HIT workers during the next five years to satisfy the electronic health record meaningful use criteria.

The other source includes hiring projections and challenges reported by surveyed U.S. HIT executives, which reported the following:

- A 2010 Modern Healthcare survey of 245 executives that asked about 12-month priorities, found that 58 percent of the respondents planned to increase HIT staffing during the next twelve months. While this is a significant amount, it does not tell the entire story. Up to 49 percent of the respondents indicated that one of the major problems in filling the positions is difficulty recruiting qualified and trained IT staff. Moreover, up to 70 percent of the respondents indicated that there is a lack of availability of IT professionals in their market.
- A 2010 College of Healthcare Information Management Executives (CHIME) survey of 238 members about the concerns associated with meeting Electronic Health Record meaningful use criteria found that staff levels and capabilities was one of the top three concerns for almost 50 percent of the respondents.

Numerically speaking, implementation and application specialists are in the shortest supply. But, while fewer clinician leaders, such as chief medical and nursing information officers and application researchers will be required, they will be more difficult to find and take more time to train. In any case, all are essential to implement EHR and other health IT systems in a way that improves care and efficiency.

## **Why is there a Projected Shortage of Health IT Personnel?**

There are two main reasons for the projected shortage of Health Information Technology personnel beginning in 2011. First, there is an increasing demand for the IT workforce, especially if one considers that hospitals and physician practices are expected to implement the Electronic Health Record and the Health Information Exchange systems – so they can capitalize on the bonus payments and avoid penalty incentives that are provided by the American Recovery and Reimbursement Act of 2009. However, without a sufficient force of health IT workers, the plans to implement such technologies will fall on deaf ears, for there will be no one to manage the information technology. And, because the bonuses and penalties are not the only programs coming down the pipe, so to speak, there is more reason to be alarmed. For example, and as already mentioned, there are tightened HIPPA data security standards that must be met. Moreover, the adoption of ICD-10, and new transition standards will be out as of October, 2013. These changes, coupled with the aforementioned bonus incentives for meaningful use helps explain the increasing demand for IT workers.

The second reason falls on the supply side of the equation. For example, because one of the biggest challenges that is bestowed upon the IT workforce is the need for an additional 50,000 IT personnel to implement and support the EHR program. This alone represents a 50 percent increase in the size of the current workforce of 108,000. Meeting these and other challenges is not going to be easy, as the health care field is going to be competing with other industries when those trained technicians leave academia and enter the workforce.

There is one spot of good news – the health care field is now attracting experienced IT professionals from other industries, in part from layoffs, but also because health care systems are getting more sophisticated and configurable. However, the not-so-good news with respect to attracting IT personnel from other industries is that many IT positions in the health care field require a clinical background – of some sort. Because it will not be enough just to show that one has implemented the electronic health record, the health IT position has become invaluable.

There remain a lot of challenges that need to be addressed by the health care field as it moves forward toward the day when the electronic health record becomes a reality. For example, health care has always had a problem matching salaries with other industries with respect to IT, but even that is changing. Additional challenges include managing attrition, learning to cope with and manage young employee issues, such as lifestyle accommodations. Once these and other challenges are satisfied, the health care industry can compete effectively for those new graduates that are coming out of the colleges, universities and research centers.

## **What is being done to help curb the shortage of IT Personnel?**

Of all of the current programs that are being used to help curb the shortage of health IT workers, the most visible one is the ARRA Health IT Workforce Development Program. This program is designed to help turn out more technicians and professionals in sufficient numbers and in time to help hospitals and practices meet the Electronic Health Record meaningful use criteria before 2020. Just one element of the development program is the Community College Consortia Program that is slated to train an additional 10,500 EHR implementation technicians per year by the year 2012. This will be, in effect, one full year after the implementation and bonus period starts for the Electronic Health Record program.

The ARRA Health IT Workforce Development Program is composed of four sub-programs with the objective of quickly educating and preparing large numbers of students for careers as HIT professionals. The aforementioned Community College Consortia Program involves a total of 85

community colleges located throughout the United States. These colleges are expected to train at least 10,500 students by the year 2012 and will involve six different roles within the IT career field as it applies to the health care industry. These are practice workflow and information management redesign specialists; clinician and practitioner consultant; implementation support specialist; implementation manager; technical and software support staff; and trainer. The Curriculum Development Centers Program, another leg of the ARRA program, is slated for at least five major universities in the United States for the development of training curricula and materials. The last two legs of the program include the Competency Examination Program, which will develop testing materials for the aforementioned six roles, and the University-based Training Program, which will provide for more advanced degrees to offer at least three additional training programs that will enhance the IT workforce.

## **How will the shortage affect a physician or a hospital?**

Let's face it, building a hospital or even a clinic-based information technology staff with the complex mix of clinical, computer and process engineering skills required to support advanced health care applications is tough. With the shortage of an IT workforce, however, this process is about to get even tougher. Without an IT workforce that is capable of managing the Electronic Health Record, implementing any programs that will enhance the effectiveness of such a program is nearly impossible. The American Health Information Management Association broadly classifies health IT professionals in three different categories revolving around their training and work roles: computer scientists, information managers, and informaticists with clinical backgrounds. Clearly, no one but an IT professional can fulfill such a role for a clinical practice or a hospital. And, without the assistance from the IT workforce that will implement and demonstrate the meaningful use of the electronic health record, the physician or the hospital at large is like a fish out of water.

However, there is light at the end of the tunnel. There are those practices and hospitals that have been able to address the shortage of IT workers by cultivating clinicians internally. For example, nurses and physicians on IT project teams often move into technology; some older workers prefer it because it gives them greater scheduling freedom, sometimes even allowing them to work at home.

One way to start dealing with the HIT personnel shortage now is to carefully stage the implementation and bring in temporary help to do the heavy lifting – the IT work. While there is a

limited pool of expertise out there, getting your hands on some IT personnel with some clinical background is not altogether impossible. Spending a little money now might help in the long run, in that your practice may be up to speed by the time the incentive payments start making their way to those hospitals and providers that have demonstrated meaningful use. It will really all depend on what you want to spend now and how important it might be to have a part-time IT staff on board until the other programs start taking shape throughout the United States. Ensuring that your hospital has a chief medical information officer and/or a chief nursing information officer on board might mean the difference between being able to show meaningful use and not being up to speed with respect to information technology and the electronic health records. There are also contractual ways to mediate the effects of the coming shortage. One way would be to include clauses in your contract that specifically outline the timeline for implementation as well as specifying the minimum amount of relevant experience required for any vendor staff assigned to your project.

## About Jim Tate



Jim Tate is a nationally recognized expert on the CMS EHR Incentive Program, certified technology and meaningful use objectives. Jim brings a unique combination of skills to successfully address the complex and changing issues surrounding the CMS EHR incentives for the “meaningful use of EHR certified technology” for Stage 1 and beyond. He is an accomplished project manager in the development and implementation of both EHR and Practice Management systems and has worked with over 50 Health Information Technology vendors. He has led numerous implementations in the United States and Asia.

Jim founded and serves as President of EMR Advocate, LLC. which provides extensive consulting services to physicians, EHR vendors, developers and other stakeholders in the Health Information Technology industry. EMR Advocate has actively supported more than 40 Ambulatory and Inpatient EHR vendors in their Certification projects since 2006. Jim has a multi-decade background in clinical workflow management and has been directly involved for the past 5 years in the due diligence, planning and implementation of electronic health records. He has consulted with physician groups, software vendors and other industry entities. His knowledge and ability to see and address both provider and vendor concerns allow him to bring extraordinary value to his clients.

Jim is committed to the proper use of technology to improve health care. Jim presents frequently at national HIT conferences, is active on HIT blogs and webinar presentations. He is sought after by the investment community for his input on the trends and direction of the HIT industry.



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