

The ARRA Act

The *American Recovery and Reinvestment (ARRA) Act* of 2009 set forth \$789 billion in economic recovery programs. The Act was signed by President Obama on February 17, 2009.

The HITECH Act

The *Health Information Technology for Economic and Clinical Health (HITECH) Act* is a piece of ARRA that allocates \$19 billion for health providers and hospitals that adopt electronic health record (EHR) technology.

HITECH Incentives

Eligible medical providers can qualify for \$44,000 or more in HITECH incentives for use of an EHR between 2011 and 2016. Providers who do not adopt EHR technology by 2015 will be penalized. A three provider practice could receive \$132,000 in Medicare incentives through HITECH.

Who Qualifies

Providers who bill Medicare or Medicaid, including doctors with MD, DO, DPM or OD credentials, physician assistants, nurse practitioners, clinical nurse specialists, nurse-midwife, nurse anesthetist, clinical social workers, clinical psychologists or dietitians.

"When everything is digitalized, all your records - your privacy is protected, but all your records on a digital form - that reduces medical errors. It means that nurses don't have to read the scrawl of doctors when they are trying to figure out what treatments to apply. That saves lives; that saves money; and it will still ensure privacy."
– **President Barack Obama**

The ARRA Stimulus Plan in Action: Case studies from the health technology sector

In February 2009, President Barack Obama signed into law a plan for economic recovery designed to pull the United States out of a deep recession. Encompassing \$789 billion in funding for stimulus programs, the American Recovery and Reinvestment Act included \$19 billion to promote the adoption of Electronic Health Record (EHR) technology in the medical community.

There have been dramatic results of this economic stimulus on the EHR community over the past year:

- Expansion and job creation in the EHR technology sector
- Rising EHR adoption by physicians
- Creation of new health IT academic programs
- Rapid innovation and new disruptive business models

In this whitepaper, we will cover the growth in each of these areas in additional detail and will look ahead to the stimulus plan impact through 2016.

The significance of the health information technology boom reaches far beyond just the high-tech and healthcare communities. Patients and public health can benefit as well as EHR technology has been demonstrated to improve the quality of care, reduce medication errors, lower malpractice claims and improve communication among clinicians¹.

EHR Market Size

The 1.2 billion-dollar market for EHR is expected to grow nearly 400% by 2013, according to experts. This translates to 9.3 billion in three years.ⁱⁱ

Share of the IT Market

According to Scientia, a global management advisory firm, healthcare IT sales will grow by 25%, from 4% to 5% of the worldwide healthcare market, by 2013.ⁱⁱⁱ

Health Job Market

There are over 800,000 physicians in the US.^{iv} Seven million people work as healthcare practitioners and technicians altogether.^v

HITECH Job Creation

John Halamka, CIO of Harvard Medical School, predicted that the switch to EHR technology would create as many as 50,000 new jobs. The AMA has predicted 70,000 new jobs.^{vi} The Bureau of Labor Statistics estimates an additional 100,000 health IT professionals.^{vii}

Growth of the EHR Sector & Job Creation

Health IT has been a bright spot during the recession. Backed by the \$44,000 stimulus incentives for providers and a short timeline for EHR adoption, the sector boomed in 2009. The boom is predicted to continue, market analysts predict 400% growth in the 1.2 billion market for EHR technology by 2013.

In 2009, large public EHR companies such as Allscripts saw stock price increases after the ARRA announcement.^{viii} And smaller EHR vendors, such as eClinicalWorks announced expansions and new hiring.^{ix}

At Practice Fusion, the growth has been dramatic. From a small cloud computing start-up in 2008, Practice Fusion saw 400% growth in 2009 and became the fastest growing EHR community in the country.

- Increased from 1,500 to 25,000 Practice Fusion users in 2009.
- Successfully fundraised with Band of Angels, Felicis Ventures, salesforce.com and Morgenthaler during one of the most difficult venture funding climates in the last 12 years.^x
- 212% increase in Practice Fusion employees during last 6 months of 2009. Creation of new jobs in San Francisco, CA.
- Two facility moves to accommodate hiring growth.

And growth in the sector is not limited to EHR vendors. EHR sector growth has created opportunities for IT professionals, coders, billers, certification agencies, CIOs, statisticians, hardware companies, broadband providers, government employees and consultants. The healthcare sector added 300,000 jobs in 2009, at a time that non-farm jobs in America fell by 6 million.^{xi} Leaders in the health IT sector have predicted a demand for 50,000 to 100,000 new jobs to facilitate EHR implementation over the next few years.

Current EHR Adoption

Only 6.3% of physicians reported having a fully functional electronic health records system in use in 2008/2009, 20% reported having a limited system.^{xii}

Average EHR Costs

Initial EHR costs averaged \$44,000 per full-time-equivalent (FTE) provider, and ongoing costs averaged \$8,500 per provider per year.^{xiii}

EHR Adoption Predictions

Based on an estimate that there will be 404,000 eligible professionals in 2011, CMS predicts that between 10% and 36% will adopt EHR in 2011, 15% to 44% in 2013, and 21% to 53% in 2015.^{xiv}

California in the Lead

37% of physicians in California report some electronic health record adoption, compared to 28% nationwide.^{xv}

Physician Adoption of EHR Systems

Over the past decade, physicians have been slow to adopt electronic health record technology. A 2007/2008, New England Journal of Medicine report showed that only 4% of physicians reported having a fully-functional EHR system and 13% reported having a limited system.^{xvi} By the next year, these numbers had increased to 6.3% and 20%. For 2009/2010, we anticipate greatly increased adoption figures.

Several factors are thought to have contributed to slow adoption:

- High up-front costs for EHR software, \$44,000 upfront per user and \$8,500/year ongoing on average.
- High levels of required IT infrastructure for installing local servers and creating custom templates.^{xvii}
- Lack of usability with software programs that are often several years old.^{xviii}
- Difficulty of changing practice workflows to accommodate new technology.

The creation of a \$44,000 stimulus for EHR adoption removes some of the cost barrier with legacy EHR systems. It also creates a dynamic market for doctors to price compare and find solutions that fit their needs. In addition, Medicare and Medicaid penalties beginning in 2015 provide the proverbial stick to the incentive's carrot.

Practice Fusion's EHR system is free and web-based – eliminating both the cost and technology hurdles faced by medical practices. Especially for the 80% of physicians who practice in groups of 9 or less and have limited financial resources for EHR adoption.^{xix}

ARRA Academic Grants

For programs that “carry out a demonstration project to develop academic curricula integrating certified EHR technology in the clinical education of health professionals (section 3015), or; Establish or expand medical health informatics education programs (section 3016).^{xx}

Blumenthal on Education

“To realize the widespread adoption of EHRs and achieve the vision of a transformed health system that health IT can facilitate, the workforce needs to be expanded and properly trained to facilitate rapid uptake of health IT by healthcare providers” - National Coordinator for Health IT, David Blumenthal, MD^{xxi}

Practice Fusion Helps

"I do not take for granted the ability to have my students access Practice Fusion as I was turned down by all of the major EHR vendors (most did not call back or e-mail). Practice Fusion is developing a good reputation for user friendly GUI and good support" - Dr. Bob Hoyt - University of West Florida

Academic Programs

The economic stimulus plan also includes incentives and grants for educational programs in health informatics. Universities carrying out a demonstration or creating a curricula and universities establishing or expanding medical health informatics programs are both eligible for grants from the Office of the National Coordinator for Health Information Technology.^{xxii} This includes schools of medicine, graduate schools, certification programs, undergraduate programs and masters degree programs.

In January 2010, HHS announced an additional \$38 million for health IT workforce grants to train professionals for EHR support and adoption positions.^{xxiii} At a time when higher education has been hard hit by recession, including a 22% endowment drop, these grants can provide vital funding.^{xxiv}

The same adoption issues around cost and IT demands faced by medical practices are amplified at the academic level. Providing large groups of students with an EHR system with which to train has been difficult for many academic programs.

Practice Fusion has seen a significant increase in demand for EHR programs to be used with these new health informatics courses. We work with several academic programs to provide instructors and student access to our free EHR system, including:

- The University of West Florida
- Orange County Public Schools in central Florida
- New York Institute of Technology
- Lake-Sumter Community College
- Tacoma Community College

Not only are these academic grants creating much-needed trained health IT graduates, but are also creating jobs themselves as programs expand, add staff and build new infrastructure to support this education.

The Time for Change

"To be a 21st-century physician, to be a 21st-century hospital, we can't record data the same way the Greeks did in 500 B.C." – David Blumenthal, MD.^{xxv}

Medication Errors

"There are an estimated 1.5 million medication errors each year in the US; that's unacceptable. e-Prescribing is one of the mostly widely accepted tools – proven repeatedly – for reducing medication errors and streamlining practice efficiency," – Ryan Howard, Practice Fusion.^{xxvi}

Health 2.0 Conference

Attendance at the Health 2.0 conference for innovation in healthcare grew from 350 in March 2008 to over 1,000 in October 2009.^{xxvii}

Practice Fusion's Difference

"Saves money and is free for doctors, while competitive systems are tens of thousands of dollars." – Fast Company

Rapid Innovation & New Disruptive Business Models

Opportunities created by the stimulus plan for the health IT in 2009 have led to a wave of innovation across the sector. Efforts to improve care and reduce its costs have been re-energized in particular.

- Tools that empower patients with data and decision support have come front and center.^{xxviii} The rise of iPhone medical applications is just one sign of this shift.^{xxix}
- Telemedicine and connecting with doctors by email, web or phone is also increasing, with wireless home health projected to grow to \$4.4 billion by 2013.^{xxx}
- Evidence-based medicine is on the rise, aided by \$1.1 billion in comparative-effectiveness research funding under ARRA.^{xxxi}

In the ambulatory EHR sector, Practice Fusion's free, web-based EHR has been a major disruptive force in an industry once ruled by client-server machines with \$50,000+ software licenses and additional fees for implementation and training. Medical providers can sign-up to use the EHR online and start charting in five minutes with no cost or installation. They can connect to labs, send e-prescriptions and share records with colleagues and patients online, all on the day they sign up.

By applying best practices from the last 10 years of technology advancement, Practice Fusion has created a system that uniquely modernizes and responds to needs of the medical community. Our EHR is free, web-based, easy-to-use, secure, comprehensive and constantly improving.

In the rapidly evolving world of health information technology, Practice Fusion is well poised to adapt and succeed.

Sources

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