



Overview of the Planned National Electronic Health Records System

ICUcare, LLC's vision for the transformation of the nation's health care system from a 20th century paper-based records system to a 21st century electronic-based records system is vastly different from the one envisioned by the government. We believe the development of the *My eMHR* Web Portal represents a viable alternative approach of how to achieve this important and significant objective. ICUcare LLC believes in the empowerment of people as opposed to government. We believe quality health care should be available to all Americans. We believe that the decision to share a person's medical information to anyone or at any time should rest with the individual.

We believe an individual's medical information is personal in nature and the exclusive property of the individual. According to HIPAA, such information should only be disclosed to the immediate "circle of care providers" responsible for providing medical services to the individual. However, with the introduction of the HITECH Act of 2009, this will soon change. The government has charted a course for the creation of a national electronic medical records system that some say will have far reaching consequences, and certainly more impact to the national health care system than anything represented by the much debated Health Care Reform Bill now before Congress.

History and Present Status of the National Electronic Health Record System

In the 2004 State of the Union address, President George W. Bush proclaimed that "all Americans will have an electronic medical record within 10 years". The President went on to say, "By computerizing health records, we can avoid dangerous medical mistakes, reduce costs, and improve care". That was the call to arms, the start to a reform of the Health Care Industry of the like, never before seen. The administration soon appointed David Brailer, M.D., Ph.D., to lead a federal government initiative called the National Health Information Network. The purpose of this initiative was to create an interoperable national system for the secure exchange of healthcare information. Among other responsibilities, the initiative would promote EMR adoption by all physicians in America. Later that year, the Office of the National Coordinator for Health Information Technology (ONC) was created. It reports directly to the Health & Human Services (HHS) Secretary. Under the ONC, Regional Health Information Organizations (RHIOs) have been established in many states in order to promote the sharing of health information.

Since that time, the government has thrown billions in search of the Holy Grail, "a national health electronic-based records system". The goal in and of itself is most worthy. The potential advantages are enormous! Having a cradle-to-grave view of a patient will allow doctors to focus on preventive care, rather than just treating diseases. The ability to access medical data such as CT Scans, MRI's etc., thus not having to duplicate the same test is not only more efficient and less costly, but improves the quality of care to the patient. For employers, insurance companies, and the government, electronic medical records promise to help reduce skyrocketing health care costs, which now come to US \$1.9 trillion, or about 16 percent of gross domestic product.

At a speech given from George Mason University in Fairfax, VA on January 8, 2009, then President-elect Barack Obama declared that "the government will push for electronic health records for all Americans within five years in order to save both dollars and lives". He went on to say "we will improve the quality of our health care while lowering its cost, we will make the immediate investments necessary to ensure that, within five years, all of America's medical records are computerized,"..."This will cut waste, eliminate red tape and reduce the need to repeat expensive medical tests."

"But it just won't save billions of dollars and thousands of jobs; it will save lives by reducing the deadly but preventable medical errors that pervade our healthcare system," he said.

On February 17, 2009, President Barack Obama signed into law the American Reinvestment Recovery Act (ARRA) which most people on Main Street and the press at large, refer to as the "stimulus bill". Yes, that 778-pag bill that was posted on the House website late in the evening of February 12th, passed by a vote of 246-183 on February 13th by house members who had never read the bill, changed the healthcare industry in ways no one ever imagined. In that one little bill, passed without so much as any national debate or any form of transparency was the funding required to enable the government to reform health care in a way that impacts every American's life with absolutely no fanfare or reporting by the press whatsoever.

Factoids:

- a. The ARRA 2009 Bill represents some 778 pages.
- b. Funding for the ARRA of 2009 represents some \$787 Billion (\$1 Billion+/Page)
- c. Health Care Reform in the form of a government controlled National Electronic Health Records System involving and impacting every facet of the health care system consumed 206 pages or 26% of the total bill.
- d. National health expenditures, factoring in inflation, are projected to reach \$4.4 trillion in 2018, up from \$2.2 trillion in 2007. (CMS National Archive)

Starting on page 235 of the final bill, the bill authorizes the Secretary of HHS to appoint a National Coordinator to oversee all activities associated with the HITECH Act. The stated purpose and specific goals of the HITECH ACT are as follows: (As taken from Page 235 of the Final Bill)

Health and Human Services (HHS) PURPOSE -The National Coordinator shall perform the duties under subsection (c) in a manner consistent with the development of a nationwide health information technology infrastructure that allows for the electronic use and exchange of information and that:

- (1) ensures that each patient's health information is secure and protected, in accordance with applicable law;*
- (2) improves health care quality, reduces medical errors, and advances the delivery of patient-centered medical care;*
- (3) reduces health care costs resulting from inefficiency, medical errors, inappropriate care, duplicative care, and incomplete information;*
- (4) provides appropriate information to help guide medical decisions at the time and place of care;*
- (5) ensures the inclusion of meaningful public input in such development of such infrastructure;*
- (6) improves the coordination of care and information among hospitals, laboratories, physician offices, and other entities through an effective IT infra-structure for the secure and authorized exchange of health care information;*
- (7) improves public health activities and facilitates the early identification and rapid response to public health threats and emergencies, including bio-terror events and infectious disease outbreaks;*
- (8) facilitates health and clinical research and health care quality;*
- (9) promotes early detection, prevention, and management of chronic diseases;*

(10) promotes a more effective marketplace, greater competition, greater systems analysis, increased consumer choice, and improved outcomes in health care services; and

(11) improves efforts to reduce health disparities.

The purpose or objectives are a continuation of what was set forth in 2004 and represent a substantial undertaking of immeasurable value to the American people, the Healthcare Industry and the nation.

Benefits:

1. **Improved patient care** With EMRs, there is less potential for medical errors as well as improved quality and safety in patient care. There is no substitute for having accurate information about a patient's condition and medical history immediately accessible in the doctor's office, the clinic, at the patient's bedside, and even instantly in the operating room. Computerized Physician Order Entry (CPOE) one component of EHR has been shown to increase patient safety by listing instructions for physicians to follow when they prescribe drugs to patients. Naturally, CPOE can tremendously decrease medical errors: CPOE could eliminate 200,000 adverse drug events and substantially reduce the estimated 7,000 deaths each year from medications errors.
2. **Accessible patient data—anywhere** Critical patient information becomes as mobile as our patients are with EMRs. Up-to-date medical information is accessible even when people move to a new town, travel for work or vacation, or seek medical treatment from specialists in another corner of the country.
3. **More time with patients** Physicians and nurses have more time to spend with patients. EMRs create more time for the work care providers are trained to do. Currently, healthcare professionals spend too much time performing administrative tasks as opposed to caring for our patients. Care Providers waste entirely too much of their valuable time searching for, waiting for, and correcting information—all common symptoms of a paper-based system. While there is an initial *cost* in learning and changing to an automated system, the long term benefits should include more time and better information to diagnose and treat our patients.
4. **Improved patient communications and collaboration** Access to patient information in electronic systems has tremendous potential to improve communications and collaboration between patients and their healthcare providers. Giving patients more secure, confidential access to their own medical records and pertinent information about their condition and health characteristics can facilitate better informed healthcare decisions. When electronic medical records are made available to patients through a secure portal, as some healthcare organizations are doing, individuals become empowered to maintain and manage their health more effectively and to comply more easily with treatment plans.
5. **Scientific Research** In the long term, such a system would also make it easier to do epidemiological studies, to discover which treatments and medications work and which do not. And it would offer the means to conduct surveillance for pandemics and biological terrorist attacks.

Case Study:

1. In 1993, Mayo Clinic in Rochester, NY embarked on fully automating an electronic-based medical records system. The effort included a \$16 million upgrade to its fiber-optic network and the installation of 16,000 client-server workstations, a central database, and software. The clinic's electronic medical record system became fully operational in 2004, giving Mayo one of the most comprehensive and completely paperless medical record systems of any hospital in the United States. According to David Mohr, chair of the clinic's information management and technology committee, the Rochester site now relies on the system to support its 1.5 million outpatient visits and 60,000 hospital admissions every year.

Each new patient at Mayo is assigned an initial electronic medical record that is created using a unique registration number. Once you arrive for treatment, your record is called up from the central database, and during and after the visit, your doctor enters notes and other information into that record. Test results are automatically added to your record, and prescriptions are automatically sent to the clinic's pharmacy, which checks for drug interactions and allergies. The electronic record is also used to schedule additional visits, generate your bill, and handle other administrative tasks.

Mayo won't say exactly how much it spent, but it is estimated that the Rochester facility's system cost around \$80 million over 10 years. What does the clinic get in return? Cost savings of about \$35 million to \$40 million annually, primarily from the elimination of administrative overhead such as record-keeping staff, and other benefits including improved quality of care.

As they say in Washington, "the devil is in the details"! In the case of the "plan" as envisioned by this administration and to borrow the phrase from the administration, "this train has already left the station"! The details being, "how do we achieve the stated objective", was never made part of the original bill. This bill, which was put together in 13 days, passed by both houses of congress and signed into law all in less than three weeks simply allocated money to be spent in pursuit of the objective. The following is a brief summary of some of most controversial aspects of the "plan" as is presently being implemented.

I. Creation of Health Information Exchanges (HIE's)

The "plan" calls for the creation of a National Health Information Exchange Network made up of smaller HIE's located in every state and with regional HIE's located throughout each State. By way of the HITECH Act of 2009, these exchanges will be created with planned implementation by 2015. Included in the HITECH ACT is a provision that every hospital, clinic, physicians practice across the country will be required to communicate (exchange) medical data to the regional HIE's for distribution to the State HIE's and ultimately the National Health Information Exchange.

These "exchanges" will be privately owned, some not-for-profit, some for profit and all independently operated. They will be under a license contract with the Federal Government and have rules and regulations outlining how they are supposed to operate with oversight by federal regulators of some sort, much like those associated with Fannie Mae and Freddie Mac.

The privacy threat alone posed by the interoperability of a national network is a key concern. One of the most vocal critics of EHRs, New York University Professor Jacob M. Appel, has claimed that the number of people who will need to have access to such a truly interoperable national system, which he estimates to be 12 million, will inevitably lead to breaches of privacy on a massive scale. Appel has written that while "hospitals keep careful tabs on who accesses the charts of VIP patients," they are powerless to act against "a meddlesome pharmacist in Chicago" who "looks up the urine toxicology on his daughter's fiancé in San Francisco, to check if the fellow has a cocaine habit." This is a significant barrier for the adoption of an EHR. Accountability among all the parties that are involved in the processing of electronic transactions including the patient, physician office staff, and insurance companies, is the key to successful advancement of the EHR in the U.S. Supporters of EHRs have argued that there needs to be a fundamental shift in "attitudes, awareness, habits, and capabilities in the areas of privacy and security" of individual's health records if adoption of an EHR is to occur.

II. Incentives for the Adoption of Electronic Health Records (EHR's)

The American Recovery and Reinvestment Act of 2009 (Recovery Act) authorizes the Centers for Medicare & Medicaid Services (CMS) to provide reimbursement incentives for eligible professionals and hospitals who are successful in becoming "meaningful users" of certified electronic health record (EHR) technology. The Medicare EHR incentive program

will provide incentive payments to eligible professionals (EPs), eligible hospitals, and critical access hospitals (CAHs) that are meaningful users of certified EHR technology.

The Medicaid EHR incentive program will provide incentive payments to eligible professionals and hospitals for efforts to adopt, implement, or upgrade certified EHR technology or for meaningful use in the first year of their participation in the program and for demonstrating meaningful use during each of four subsequent years.

These “incentive payments” to physicians and hospitals are based on adoption and “meaningful use” of a certified EHR system. Physicians who demonstrate compliance with “meaningful use” will qualify for a total of \$44,000 spread out over five years and distributed as follows: \$18,000, \$12,000, \$8,000, \$4,000 and \$2,000.

Hospitals have a somewhat more complex, but equally, no less costly incentive program for demonstrating compliance at a much less stringent level of criteria as do the physicians in a private practice.

One would have to assume that the use of “incentives” was apparently considered to be necessary in order to get the care providers to “buy-in” to the program. The “plan” also provides for “disincentives” for those who do not. The disincentives involve reduced Medicare and Medicaid reimbursement rates to care providers who do not comply with the program starting in 2016. The disincentive program is based on a sliding scale program with decreasing rates of reimbursement for all care providers in subsequent years.

Cost of The HITECH “Plan”

According to the HHS, the incentive program is expected to cost some \$36 Billion over five years with another \$2 Billion related to cost associated with the infrastructure of the HIE’s. These numbers represent the only funded appropriations as of this date.

The above projected cost would seem to fall well short of the actual cost associated with the “plan” given the following numbers.

1. There are some 1,200,000 practicing physicians in the United States.

$$1,200,000 \times \$44,000 = \underline{\$52,800,000,000}$$

2. There are some 4,077 acute care hospitals in the United States. The “plan” sets a cap of \$1.5 Million per hospital, which would only provide a reimbursable rate based on 34 physicians per hospital. Additionally each acute care hospital could qualify for a “discharge” incentive program that potentially represents another \$4,622,000. (Based on 23,000 discharge patients per year payable in addition to the former incentive program and continuing through 2018)

$$\$1,500,000 + \$4,622,000 = \$6,122,000 \times 4,077 = \underline{\$24,959,394,000}$$

3. Combined total of item 1 and 2 above:

$$\$52,800,000,000 + \$24,959,394,000 = \underline{\$77,759,394,000}$$

The Center for Information Technology Leadership (CITL) in Wellesley, MA puts the 10-year cost of the National Health Information Network (NHIN) at \$276 billion, while the Rand Corp., in Santa Monica, Calif., estimates \$115 billion. But both studies also claim that the system will generate huge savings: the CITL study estimates an annual return of at least \$78 billion, while the Rand study puts the potential savings at \$81 billion a year, through lower administrative costs, the avoidance of needless tests, and so on.

Conclusion/Commentary

We at ICUcare, LLC are in total agreement with the past and present administrations toward the “goal” or “objective” involving electronic health records technology. We know all too well the importance of moving away from paper-laden 20th century chart-based medical records system and into the 21st century. At the same time, we strongly disagree with the “plan” on how to achieve the same. As always, “the devil is in the details”!

To start with, you simply can't put together a “plan” of this magnitude in +/-14 days. You may be able to write a plan, but, designing a plan that has any chance of success is a dream. It's not as if we started out with any tangible or workable models. Assumptions on a small scale only get more complex and unworkable on a large scale, and this is a large scale.

A better plan would have been to adopt a web based portal as has been developed by the likes of Microsoft, Google, ICUcare and others. The federal government could launch and maintain a free national Personal Health Record (PHR) web portal. Every American could use the system and manage their medical information much in the same way as they manage their finances. They could carry a flash drive to any care provider of their choosing, whereby their medical history would be downloaded onto any computer using a free and universally accepted file format known as Adobe PDF (portable file format). At the conclusion of the encounter/visit, the care provider could download all relevant information associated with the encounter/visit and when the patient returns home, log back on to the National Web Portal and update their PHR.

Many other scenarios are possible too. The patient could also send or transmit their medical information to the care provider beforehand so that their waiting time in the lobby could be minimized. The system could also be designed to work with one of the most prolific communication tools ever developed, the cell phone. The advantages of using the internet and cell communications are obvious. Americans talk and communicate like no other society in the world, and their use of such technologies is growing.

Equally important, we should have opened a dialog with the American people as to the need for the change and the associated value it would bring to them, the system and ultimately the nation.

Remember, in all of this, without the ultimate “buy-in” of the American people, this system as planned will not succeed. The American people still, as of this date, have the right to privacy and that includes their medical records. The government can mandate that care providers share (send/transmit) personal medical information with each other and the national HIE databases by 2015, however, without the “consent” of the individual, they and all persons who receive and use the information will be in violation with HIPAA and other laws protecting patients' rights.

There is, however, a back door from which the government can obtain this information without consent. Every American is required to opt into the nations Medicare system at the age of 65. As such, the CMS handles all medical related reimbursement for and on behalf of the government. Every care provider is required to submit a detailed billing statement to include supporting documentation in order to receive reimbursement. Medicare presently represents over 45 Million Americans. During the next ten years, this number will grow significantly. If the government were to adopt a single-payer system (like Medicare), it would by default be entitled to receive the very information for which they plan to secure by way of the present “plan”.

In closing, we at ICUcare, LLC believe in empowering people with choices. No one knows, especially the bureaucrats in Washington, “what's best for the people”. We'll be in far better shape as a nation when the politicians in Washington learn to trust the very people that voted them into office. As long as we still have the right to vote, we should also have the right to manage the most important areas of our lives; faith, family, finances and our well-being (personal medical records).

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