

PRACTICE MANAGEMENT

Trends in Gastroenterology Reimbursement and Practice Management

Developing Universal Electronic Medical Records

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The idea of healthcare reform has been part of our national agenda for years, and members of both the legislative and medical communities, along with the general public, agree wholeheartedly that it needs to be addressed. One component of the overinflated burden of healthcare cost comes from antiquated administrative systems that do not allow for efficient and functional record keeping, to the detriment of both individual patient care and overall systems for health management. One of the multiple agendas of the healthcare reform movement is the development of a universal system of electronic medical records (EMR) that would allow access to patient information at every potential venue of care while still providing privacy, security, and autonomy of patient information.

It seems to be universally agreed that a technologically up-to-date system with access and participation mandated throughout the nation would represent a huge step forward in healthcare reform. It was with this in mind that President Bush created the position of National Health Information Technology Coordinator three years ago. However, there are several stumbling blocks that repeatedly hinder these efforts and that must be addressed. Ultimately, one must consider the basic elements of a successful, robust, universal EMR. Those elements include control, funding, security, accessibility, portability, compatibility, integration from multiple sources, and home-data procurement with medical oversight to maintain the system's integrity. Unfortunately, most corporations are far from altruistic and they are looking at ways to expand revenue sources from patients who are, from the corporation's view, consumers. The potential is endless, but care must be used to avoid a multitude of pitfalls.

Control and Money

The main questions that must be resolved in order to successfully implement any national plan for an EMR system concerns control of information and funding to develop and maintain the system. It seems clear that the only entity with the mandate to develop a system at the national level is the federal government. Only Congress has the authority to develop an EMR system that is designated as universal and requires compliance from all healthcare providers. Without a unified system, each provider, whether they be a hospital, an HMO system, or a private practice, will have their own solution and the end result will be similar to the current problem: incompatibility of systems and the inability to share information.

In terms of funding, the most likely contributor is the pharmaceutical industry. Again, it will require an act of Congress to ensure that pharma interests pay, at least partially, for a national EMR system without any undue influence or advertising content. Only government has control and the ability to ban advertising and still require funding through some form of taxation. The constant reorganization of the pharmaceutical industry through mergers, acquisitions, and the emergence of new start-ups creates an enormous logistical problem for implementation of this idea, but the alternative is to require the general public (ie, patients) to pay for EMR. Industry should not be allowed to avoid funding this system, simply because it is difficult, and a form of taxation, perhaps administered through the Food and Drug Administration should be implemented.

Ultimately, government will need to partner with private industry in the information technology sector, as well as pharmaceutical and medical-device companies, to both fund and structure such an ambitious undertaking.

Goals of the System

The main goal in developing a universal EMR system is access. Although each patient's medical record should be managed by their local primary care physician,

patient information needs to be portable and accessible to appropriate caregivers in emergency rooms and other tertiary care settings, while assuring privacy and security to patients. Thus, an internet-based, password-protected records system is most likely the best option. Portable USB drives are another option. Patients could carry their entire medical history around their wrist or neck and it could be accessed by physicians through a common, standardized system.

Facilitating this level of access is key in providing more effective and efficient treatment to patients. Once this is accomplished, secondary concerns such as cost-effectiveness will result from overall better outcomes that reduce hospitalizations and lower the overall utilization of healthcare resources.

Critiquing a Current Model

In October of 2007, Microsoft launched the HealthVault initiative, which they have billed as “a software and services platform aimed at helping people better manage their health information.” Even more recently, Google, in February 2008, announced a long-anticipated health web site to manage personal health records to be available later this year.

The Microsoft model creates a platform for uniform EMRs and positions them as a personal health information system that is not physician-managed. Throughout their press literature, they designate the major health family manager as “the Mom.” Microsoft’s assertion is that the average family health manager needs to navigate through medical information and decision making.

However, patients generally seek medical attention to be relieved of responsibility, not to take it on. This role is a tremendous amount to ask of family members, who are at varying levels of education and dedication to ensuring the well-being of their families.

A better model would involve the primary care physician partnering with the patient to manage information. For the most part, when patients ask about their options and doctors lay them out, their response is to ask the doctor “if you were me, what would you do.”

The Microsoft HealthVault system does not acknowledge that patients are not the managers and ultimately do not want to be managers of their own healthcare. Further, allowing patients full control creates a risk that they will elect not to share information with physicians, which may be detrimental to their long-term care.

Finally, the financial model for the HealthVault system furnishes it as a free service to consumers. However, Microsoft plans to pay for and profit from this service by providing a healthcare search engine to help consumers research healthcare problems, and that search function

will “provide ads that are an important part of the user experience.” By allowing pharmaceutical advertising as a part of patient self-education, undue influence on decision making is facilitated.

Structuring Information

A common structure for EMRs must also be determined in order to promote efficiency in data entry, thorough and complete patient data, and uniformity across institutions. To some institutions, the concept of an EMR simply means typing notes into a blank template, which is no different from a longhand chart system. When physicians are required to work in this manner, they take short cuts because they have limited time and they structure information in whatever way they want. In order to be universal and efficient, EMRs need to be as uniform as possible and to prompt physicians through the necessary information. The best EMR system would be one that provides a template for essential information and the ability to click through the basic data, rather than writing it out.

Providing Access

The switch to EMRs presents an enormous capital investment for many hospitals and other institutions throughout the country. Creating a basic, universal EMR system that is accessible to any institution, regardless of their current technological infrastructure, is another important consideration. Again, a secure, internet-based system most likely provides the best answer to the problem of inconsistent funding across institutions. If a basic EMR structure can be provided online, it will allow for participation by all institutions at a rudimentary level. Institutions will then be able to add levels of functionality as their own technological abilities allow. One fallacy of universal healthcare initiatives is the idea that comparative care can be provided across the country. Because of funding issues and issues of socioeconomic empowerment, complete equality of care will never be attainable. With regard to EMRs, the basic infrastructure must be put in place for different institutions to access them at their own levels and elaborate them incrementally, at their own pace.

Research Possibilities

The implementation of a unified, national EMR system could facilitate the aggregation of an enormous amount of medical information and result in a valuable database that would dwarf the insurance- and HMO-based databases and sponsored registries that are utilized currently in research. Data derived from controlled trials

will always be of tantamount importance in advancing our understanding and moving evidence-based medicine forward. However, a database of the magnitude potentially provided by universal EMRs could be utilized to examine new and established therapies in the clinical setting and see if they are truly successful in improving outcomes. This sort of information can be of great use, as has been seen in retrospective study of the use of drug-eluting stents versus coronary bypass surgery. It was originally thought that stents would allow for the avoidance of surgery and improved quality of life among patients with coronary heart disease. In retrospective study, this has not always proven true, and the move from bypass surgery to stents is now being reconsidered in some patients.

Drug safety, again, is initially determined in controlled trials. However, controlled trials examine a limited number of patients for a limited time span, which in turn limits their applicability, particularly in chronic illnesses with indefinite treatment courses. In these scenarios, it is important to look at larger databases after a drug has been marketed. In the real world, drugs are used in larger populations for longer periods of time and often for slightly different, off-label indications, all of which can affect their safety and require continued monitoring. When infliximab was first brought to market, safety information was available for approximately 300 patients. Now, with continued tracking through registry programs, there is a wealth of information available on over 1 million patients who have been treated over the last 10 years. We need to look at controlled trials as a starting point in establishing safety, not as a definitive test. A universal EMR system would be instrumental in allowing us to do so.

Summary

The development of a national EMR system that is accessible to patients and physicians, yet secure in protecting personal information, would represent a major advance in the ongoing process of US healthcare reform. The federal government must ensure utilization of the system and partner with industry to provide funding and technical know-how, so that an effective system is developed. Without a governmental mandate that ensures universal access and security and avoids the advertising agendas of the pharmaceutical industry, no proposed system can be successful. A universal system that provides access across venues and can aggregate patient data will create cost savings by streamlining administrative systems and promoting better outcomes that translate to less utilization of overall resources. In addition, it can be a valuable research tool, providing steadily accumulating data on the efficacy and safety of new procedures and medications in the real-world setting.

Suggested Reading

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