

## The Impact of Electronic Medical records on improvement of health care delivery

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To The Editor: There is an increasing need to incorporate the use of electronic medical records EMR in our healthcare delivery. The advancement in information technology and its impact in all sectors including healthcare has accelerated this need amidst the ever growing challenges facing healthcare today. These challenges include; reducing preventable errors, improving communication among health care providers and facilities, and controlling the cost of medical care. I may argue that employing an electronic medical record system may be the one solution that will addresses all of these issues. The literature shows that Innovations in electronic record keeping have dramatically improved communication and patient safety without increasing costs.

This system may be for recording all clinical and administrative patient information, including laboratory results, pharmacy orders, radiology and medical graphs, electrocardiograms, nursing and physician notes, and order entry. It organizes and presents all relevant data about a patient that clinicians need to support clinical decision making at the point of care. It may also include Bar Code Medication Administration system that uses wireless pointof-care technology with a bar-code scanner. Such system can dramatically reduce administration errors by validating medications and verifying patient identity. I have come to realize and appreciate the benefits of using the electronic record system during my fellowship and employment with the Veterans Administration health system.

The VA's electronic health record system has largely eliminated errors stemming from lost medical records. Outside the VA system, one in every seven hospital admissions is caused by the lack of a medical record (insufficient information at the point of care) and 20% of all lab tests are repeated because the health care provider can't access the results. With its electronic medical record system, the VA has set the national benchmark in quality of care, while keeping the cost of care per patient the same for the past 10 years.

The transformation to such a system does not take place by purchasing information technology machines and installing them in hospitals through out a nation or a region. It is a cultural transformation that requires furnishing a solid foundation through preparing and educating the staff who would use these machines and systems. It calls for establishing these schools that will teach health information classes and grant these degrees and diplomas. It requires building a credentialing process to ensure the credibility and legitimacy of these educational and training tools. This cultural change in addition involves regulating issues to safe guard patients' privacy and the handling of these medical records.

This cultural change emphasizes the need to continuing our education to improve the way we deliver health care to our patients. Improve our understanding of the complexity of the system and its inner dynamics. I hope that introducing the EMR in December 2007 issue opens the doors for tackling these important matters and incorporate these discussions in how we envision healthcare systems in our part of the world.

\* The views expressed in this correspondence are those of the author and do not necessarily represent the views of the Department of Veterans Affairs.

## **References:**

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