



Increasing Efficiency and Productivity in the Modern Day Medical Practice:

Why Electronic Medical Record Solutions Built With a Balanced Architecture Provide the Best Medicine for Doctors

January, 2009

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Current EMR Adoption Levels

Electronic medical record (EMR) software applications have been around for many years, with the earliest ones dating back to the 1960's. These solutions, which all promise to make the interruption-driven medical practice an efficient and productive revenue-generating enterprise, provide significant benefits. Those doctors who have adopted an EMR solution can attest to important individual successes and most doctors, when polled, say that EMRs can reduce medical errors and improve care.



At the same time, a large percentage of physicians nationwide have shied away from EMRs. According to a recent report in the New England Journal of Medicine, only four percent of physicians nationwide reported having an extensive, fully functional electronic-records system, and just 13 percent reported using a basic system. Many of these doctors, already nervous about trading in their charts for electronic files are unconvinced that the technology is easy enough to use or will give them the tools needed to enhance their business operations.

The Challenges with Current Technology

So why is it that doctors understand there are benefits to EMR adoption, yet aren't rushing to implement the technology? Is it cost? Not likely. Many doctors, particularly those who are surgical specialists, are top income earners. Is it a fear of change? Sure, there are a significant number of doctors who are so used to paper charts that they can't imagine using an electronic system. But, even for these individuals, there are programs that will allow them to implement technology very slowly – perhaps with electronic prescribing at first – so they can get over that fear of change.



Doctors haven't rushed to EMRs because much of the technology doesn't map to their training or the way that they think. It doesn't provide them with the tools they need to practice medicine, without actually trying to practice medicine for them.

The Balanced Architecture Model

A balanced architecture model creates flexible technology by combining three essential elements that help doctors and their staff take advantage of the latest EMR solutions but also practice medicine on their terms:

1. Doctor dashboard
2. Discreet data elements
3. Free flow text

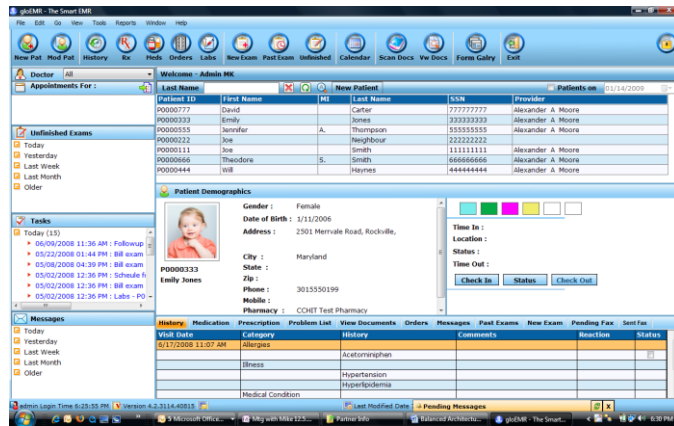
The use and integration of Microsoft technology such as Microsoft Office, Microsoft SQL Server and the .NET platform is vital in achieving a balanced architecture. No other software available is as powerful, easy to use or familiar to the general public, including physicians.

Doctor Dashboard

The doctor dashboard is a centralized screen from which each section of the patient's medical chart can be accessed with one-click. It is a home screen of sorts and is always easy to access if a user navigates from the dashboard to a subsequent screen.

Key areas of the dashboard will include the following:

- Patient demographics
- Messages and tasks
- History
- Medication
- Prescriptions
- Problem list
- Documents
- Orders
- Examinations (new and past)



In contrast to programs that feature a series of click boxes in which the doctor is prompted to answer question after question, a dashboard lets the doctor go to the area of the patient chart where he or she wants to go. The physician is never limited to a particular data element or forced to review a piece of information they don't need or want to see. Inherently, the dashboard gives the doctor flexibility and choice. Those factors are enhanced when data elements or colors on the dashboard can be customized by the doctor.

Discreet Data Elements

Clearly defined values such as data elements that appear in a drop down menu or those which can be chosen from a substantive list are referred to as discreet data elements in the balanced architecture model.

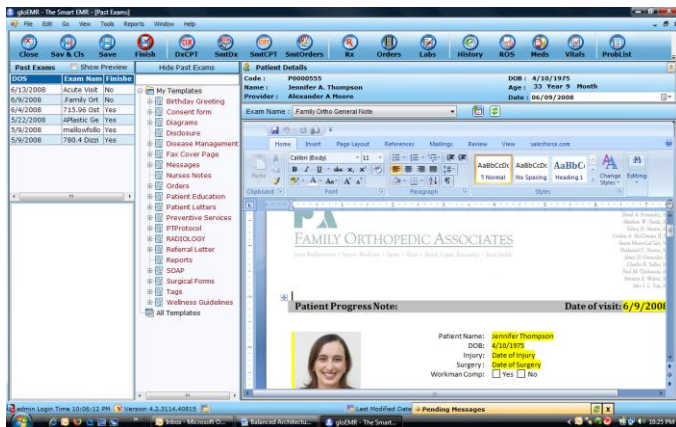
Discrete data elements provide great value to the doctor who would like to select a procedure or billing code, medication or order from a substantive list. Selecting data elements that are pulled through a database and then appear on a patient note, for example, is a tremendously powerful concept that greatly helps the doctor successfully complete the patient note after completing the examination.

Importantly, however, EMRs can't just be sets of discrete data elements. Current software designed in this way is partly to blame for the sheer number of doctors who are clinging to their paper charts. It's the balance between discrete data and free flow text that creates true power for physicians.

Free Flow Text

Free flow text input can be recognized through the following actions: typing text into a Word document, using voice recognition technology to dictate directly into a note on the computer or using Microsoft drawing tools to highlight a portion of an x-ray.

The concept is this – while there are areas of the patient chart where it makes the most sense to use discrete data elements, there are others such as the patient note where free flow text is most useful. Patient notes built using Microsoft Word, for example, can be tremendously powerful tools for the doctors. Whereas discrete data elements can be pulled into the note, the doctor can supplement information by typing or dictating.



The combination of discrete data elements and free flow text create unprecedented levels of power and flexibility in an EMR that allows doctors to drastically increase levels of productivity and efficiency. For example, doctors using balanced architecture software will be able to quickly check boxes to denote the patient's complaint, medication and orders. Then, within the note, all of that data is pulled through and augmented with dictation of text input by the doctor

that reveals his or her findings or impressions along with instructions for follow-up care and therapy, for example.

In truth, balanced architecture creates endless possibilities for physicians and staff looking to provide better care and increase efficiency and productivity.

Conclusion

Following in the footsteps of President George Bush, Barack Obama too has said that he is dedicated to initiatives that will promote EMR adoption and implementation nationwide. To be sure, there will be a lot of attention paid to EMRs in the coming months, particularly if the forthcoming economic stimulus package contains incentives for doctors to go paperless. However, the focus for everyone – doctors, consumers and legislators alike, should be on EMRs

built using a balanced architecture. It is this type of software, specifically, that has shown the most promise to enhance patient care and increase productivity and efficiency for doctors.

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For more information about gloStream and gloEMR, gloStream's flagship EMR application visit www.glostream.com or call 877-456-