



FOR THE Record

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Web Exclusive

Billions for EHRs Mask Physician IT Progress

By Art Papier, MD

A 3-year-old child presented with a sore throat to a South Carolina emergency department (ED). She had a positive triage strep test and was sent to the ED “walk-in clinic.” William Finn, MD, was about to complete a 12-hour shift on the acute side of the ED and stopped in to make sure the child was ready for discharge. Though the test for strep throat was positive, Finn became concerned when the mother pointed out small purple skin lesions. Finn did not recall purple skin lesions to be consistent with strep throat.

He quickly referenced online diagnostic software that confirmed strep as unlikely. The software prompted the physician to consider meningococemia, a life-threatening infection. Blood cultures were drawn and intravenous antibiotics were begun. Finn, noting the child’s rapidly worsening condition, had her immediately transferred to the tertiary children’s hospital. Blood cultures subsequently confirmed meningococemia. Unlike most children with meningococemia, an infection with a survival rate of 10% in children and a treatment that can take months if not diagnosed immediately, this child walked out of the hospital one week later.

If you are over the age of 50, it’s difficult to imagine Robert Young—the ever-reassuring Dr. Marcus Welby of 1960s and ‘70s television—using a computer or PDA to research a diagnosis. If you are under 40, it is difficult to understand why your doctor would *not* be using a computer as Finn does. Fifty years ago, physicians were thought to be omniscient, and the idea that they would need help in their thinking by opening even a medical book in front of the patient just did not jibe with the image doctors had of themselves and the confidence the patients had in them.

So when we spin the clock forward and consider the fact that a majority of patients use the Internet before and after a doctor’s visit and, for the current generation of medical students, computer use is second nature, we are challenged to reflect on this transition from the days of Marcus Welby to today’s physicians using computers to help them think. People in all walks of

life and professions use computers, and they seem to be collectively wondering why, in many cases, physician computer use ends with patient scheduling and billing. But does it really?

The exciting, but not widely appreciated, news is that while only 15% of physicians use an EHR, a majority use their computers or handheld devices in their daily workflow for clinical decisions, such as medication dosing and interactions.

Yet the recent passage of the American Recovery & Reinvestment Act stimulus legislation, with \$17 billion in incentives to promote adoption of electronic records by physicians, has been misinterpreted by some to indicate physician resistance to computers and modernization. The needed emphasis on computerizing the medical record may have an unintended consequence of setting us up to miss a near-term opportunity to expand physician IT use to address high-impact areas such as diagnostic delay, a leading cause of patient injury and increased costs.

While many doctors now prefer to resource medical knowledge electronically, some of the very same physicians dread the idea of computerized record keeping for a simple reason: It slows them down. Imagine two scenarios that are certainly occurring in medical practices today: In the first, a doctor quickly references computer-based medical knowledge to correctly diagnose the patient and then records that accurate diagnosis in a paper chart; in the second, the doctor uses an EHR to chart an erroneous diagnosis and an inappropriate treatment that he or she arrived at from memory. Which would you prefer if you were the patient?

Ultimately, universal, seamless use of an EHR with embedded clinical decision-support tools to improve accuracy, reduce errors, and increase safety will occur. Policy makers are taking purposeful steps now to achieve widespread use within five to 10 years. In the short term, an immediate parallel effort to expand the use of relatively low-cost Internet or handheld-based clinical decision support technologies will promote and spread the diagnostic and patient care efficiencies demonstrated by Finn and similar "leading-edge" physicians.

When the medical record industry finally turns to integrating meaningful decision support, vendors will be faced with doctors wondering what took them so long. Policy makers should encourage, fund, and spread this best practice now rather than wait for the EHR to be the only technology vehicle for improving care and lowering costs.

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