## Electronic Health Records Yield Business Payoff

# An expert cites a fourth-year return on investment of 31% due to better billing and patient follow-up.

BY JOYCE FRIEDEN
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WASHINGTON — Electronic health records make good business sense for physicians, even those in small and mediumsized medical groups, Stefanos Zenios, Ph.D., said at a health care congress sponsored by the Wall Street Journal and CNBC.

"There is a perception that there's no business case for adopting electronic health records in small or midsize medical groups," said Dr. Zenios, professor of operations, information, and technology at Stanford (Calif.) University. But that's not the case if one considers the economic data carefully, he said.

Like any other investment, electronic health records (EHRs) entail both short-term and long-term costs. "Initial costs are \$43,000 per full-time equivalent [FTE], including software and hardware and productivity losses," Dr. Zenios said, citing a recent study (Health Affairs 2005;24:1127-37).

However, the same study also showed an \$18,000 increase in revenue per FTE due to better billing and better follow-up of patients, Dr. Zenios added. And by the fourth year of using EHRs, the return on investment is 31%.

"If you would take all money you are spending to install and maintain the system, and put it in the bank, on average you would be making 5%-7% [in interest].

Even if you put it in the stock market in the 1990s, you would be making 10% on that money," he said. "Not even the venture capitalists can see returns as high [as 31%]. So that's a compelling financial case, which primarily comes from better billing."

Better data mining is another way that practices can increase practice revenue. For instance, one 26-member cardiology group in North Carolina used EHR data to look for patients at risk of sudden coronary death. Out of the 80,000 patient records searched, they found nearly 300 patients who were candidates for primary prevention and more than 1,400 patients who were candidates for secondary prevention.

This then translated into more than 1,300 consultations, 900 echocardiograms, 500 T-wave tests, and 500 implantable cardioverter defibrillator implantations. That had the clinical impact of averting 37 sudden cardiac deaths each year, and the financial impact of bringing \$2.8 million in additional revenue to the practice, Dr. Zenios said.

Finally, being an early adopter of EHRs can put practices at a competitive advantage. Dr. Zenios cited another study estimating that widespread use of EHRs in the United States could bring a total estimated savings to the entire health care system of \$245 billion. Of that, an estimated

\$23 billion would come in the form of fewer physician visits (Health Affairs 2005;24:1103-17).

In the face of this possible reduction in business, if all small and medium-sized medical practices were to invest in EHRs, no one's share of the shrinking outpatient market would change, Dr. Zenios said. But if only some groups invested in them, "they would gain an advantage" because of the increases in practice efficiency, while their competitors' market share would go down.

"To protect your business, it may make sense to have an EHR," he said.

Like any other investment, installing an EHR system is not risk-free, Dr. Zenios warned. He offered several suggestions to help physicians better manage the risks involved:

▶ Redundancy, redundancy, redundancy. "People put a new information technology system in place, and the next morning they turn off their previous system," he said. "It doesn't make sense. It's costly to have both systems in place, but

that protects you. For 3-6 months, there

has to be some redundancy.

► Assess the ability of the system to improve your billing processes. For example, the system may be able to flag procedures for which physicians are routinely underbilling and bill them at the proper level

► Assess the system's capability to take advantage of all the data that are going to become available. "Some innovative practices are using this capability to deliver better quality of care to their patients and improve their revenue," he said.

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### IT Leaders Want to Make Health Records More Accessible

BY MARY ELLEN SCHNEIDER

Senior Writer

Over the next year or so, leaders in the health information technology community will work on ways to make medication history and some general demographic information available to consumers in a portable health record.

Experts at a Webcast meeting of the American Health Information Commu-

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nity agreed that this is the "lowhanging fruit" that could eventually pave the way for widespread access to portable, consumer-controlled personal health

records. The American Health Information Community is an advisory committee to the Department of Health and Human Services.

The development of portable electronic demographic information, or registration information, would be a way to do away with the medical clipboard, HHS Secretary Mike Leavitt said.

"The timeliness of access to medical information is critical to patients," said Nancy Davenport-Ennis, CEO of the National Patient Advocate Foundation and a member of the American Health Information

Community. Today, most patients feel they own their medical record but when they go to get lab results from their physician, it can often take days or weeks, she said.

But one of the major hurdles in creating secure and portable patient health records is authentications, said Dr. Reed Tuckson of UnitedHealth Group, who presented information to the group.

Other obstacles include the inability to locate patient information across multiple

settings, segmentation of the consumer market, privacy concerns, low levels of consumer trust, few electronic health records to connect to, and the lack of an established business model.

But there have been some successes, said David Lansky, Ph.D., of the Markle Foundation, who presented information to the group. For example, the Department of Veterans Affairs set up a patient portal, and the Department of Defense has a similar program. And some health plans offer prepopulated personal health records. "We're not starting with a blank slate," Dr. Lansky said.

Providing medication history electronically to patients is something that could be done quickly, Dr. Lanksy said. The Markle Foundation was one of the groups

that helped spearhead efforts to do just that with www.katrinahealth.org, a Web site that allowed certain physicians to access drug histories for hurricane evacuees.

It's helpful that the public already recognizes the value of using this type of information in an emergency situation, Dr. Lansky said.

Providing electronic access to general demographic data or registration information holds the potential for increasing convenience for patients and improving accuracy when sharing information. But privacy issues would need to be addressed and there is the potential for replicating errors, he said.

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