'Meaningful' Medicine

BY MATT ALDERTON

n February 2011, 61-year-old Beth Jones was feeling faint. She therefore made an appointment with her primary care physician — an internist at Summit Medical Group in Westfield, N.J. — to see what was wrong.

"She found a nodule in my thyroid and sent me to an ear, nose and throat doctor in the same medical group," says Jones, who requested her real name not be used. "I went to see him with my husband and he said it was thyroid cancer."

Because the diagnosing physician was also worried about her heart, he sent Jones to a cardiologist, who performed a series of tests — all of them negative — then cleared her for surgery, at which point she was referred to a thyroid surgeon who operated.

Within 10 days, Jones saw three specialists and encountered scores of nurses, administrators and technicians. It was turbulent, confusing and scary — but ultimately successful, according to Jones, who is now well and attributes her health in part to her doctors' use of electronic health records (EHRs).

"The annoying thing about going to doctors is you have to fill out all these forms every time you see them," Jones says. "With electronic health records, you don't have to do that."

EHRs improved not only the convenience of care, but also the quality. "Everybody was very focused on me," Jones continues. "The doctors knew everything about me and communicated with each other. In fact, my internist was getting reports from the ear, nose and throat doctor and the cardiologist. She called me up and said, 'I know you're going through a lot right now, but I promise that when the process is over you're going to be fine.' I didn't call her and tell her what was going on; she checked my records and called me."

Although they've been around since the 1960s, hospitals and medical practices have been slow to adopt EHRs, which are electronic patient records that store health information digitally so it can be easily updated, shared and accessed by physicians at different points of care. In fact, only 6.3 percent of U.S. physicians currently use a fully functional EHR system, according to a 2009 report from the Centers for Disease Control and Prevention.

To the benefit of patients like Jones, the Chicago-based Healthcare Information and Management Systems Society wants to change that. An association that's dedicated to improving health care through the use of information technology and management systems, its goal is eventually achieving 100 percent adoption of EHRs to improve both the cost and quality of health care.

When the federal government passed legislation in 2009 that would take it one step closer to its goal, HIMSS therefore reacted with lightning-fast reflexes. The result — one of the largest outreach efforts in the history of the organization — created education, influenced conversation and shaped regulation in pursuit of a "tipping point" for EHRs and health IT.

Legislating Technology

Health care is as much about healthy economies as it is healthy individuals. When the Great Recession commenced in September 2008, that became immediately and completely clear, according to HIMSS Vice President of Government Relations Dave Roberts, MPA, FHIMSS.

"In the early to mid-2000s, people began to realize that IT was extremely important and could help transform health care by improving the quality and reducing some of the costs," he explains. "The Bush Administration put a lot of thought into how IT could be used to transform the health care system, but they made a conscious decision not to put any tax revenue into jumpstarting the adoption of electronic health records."



Then fall 2008 happened: Wall Street collapsed. Barack Obama was elected president. And Democrats seized a majority in Congress. "Because health care is almost 20 percent of the U.S. economy, both the new Congress and the new president decided it was an area where we should be investing federal tax dollars to stimulate the economy," Roberts continues. "So, the economic stimulus legislation was passed, and it included in it incentive payments for doctors and hospitals that purchase certified IT products and can prove they are effectively using those products."

On Feb. 17, 2009, President Obama signed into law the American Recovery and Reinvestment Act. Title XIII of ARRA, called the Health IT for Economic and Clinical Health — or HITECH — Act, allocated \$19.2 billion toward health IT that will be used to incentivize the adoption and use of EHRs by health care organizations that bill for Medicare and Medicaid.

"Depending on the program — Medicare or Medicaid

What's an Electronic Health Record?

According to the Centers for Disease Control and Prevention a "fully functional" electronic health record system includes the following features:

- Digital patient history and demographics
- Digital physician clinical notes
- Computerized orders for prescriptions
- Computerized orders for lab tests
- Computerized lab results
- Computerized orders for radiology tests
- Digital imaging results
- Guideline-based interventions or screening tests

— they have either a five- or six-year window to earn these incentives," explains HIMSS Executive Vice President Carla Smith, CNM, FHIMSS. "At the end of that window there's a penalty program that will go into effect, and those clinicians and hospitals across the nation that bill Medicare and Medicaid and cannot demonstrate effective use of IT will receive less federal money per transaction. It's a carrot-stick approach."

The remarkable thing about the HITECH Act isn't that it incentivizes EHR adoption; it's that it incentivizes EHR usage. In fact, the legislation specifically requires hospitals and physicians to demonstrate "meaningful use" of EHRs to qualify for incentives.w

"The term 'meaningful use' isn't about implementing a piece of software," Smith says. "It's about meaningfully using it to help people stay healthy and manage the costs of care."

The purpose was simple. The particulars, however, promised to be complicated. After Congress passed ARRA in 2009, the HITECH Act was inherited by the Centers for Medicare and Medicaid Services (CMS), which is charged with turning the legislation into regulation. To accomplish that, it will roll out a detailed definition of "meaningful use" in three stages through 2015. So far, only Stage 1 is complete: CMS issued a notice of proposed rulemaking (NPRM) for Stage 1 in December 2009, commencing a 60-day period of public comment that concluded in March 2010. The final rule for Stage 1 was published last July.

"This was an enormous chunk of legislation that was going to tell hospitals and providers what to do, how to do it, when to do it, how quickly to do it and in what order," HIMSS member Harry Greenspun, M.D., chief medical officer of Dell Services — Dell's health IT division — says of the HITECH Act. "Most HIMSS members are not in a position to sit in Washington, D.C., walk the halls of Congress and sit in a room 24 hours a day watching C-SPAN. So, HIMSS has really taken a leadership role in keeping people informed about what's going on, what it means and how the industry should react."

Adds Roberts, "The economic stimulus — and meaningful use, in particular — is probably the biggest legislative event in the history of our organization. So, we went into overdrive trying to make sure we prepared our members with education and training. It's been one of the biggest coordinated efforts in the history of HIMSS."

Cause-Based Care

Understanding HIMSS' response to meaningful use requires first understanding its history.

Established in 1961 as the Hospital Management Systems Society, HIMSS represents more than 35,000 individual members, 520 corporate members and more than 120 nonprofit organization members. Originally founded as a professional society for hospital administrators, it expanded its focus to health IT in 1986 and merged with CPRI-HOST, a health care association dedicated to EHRs, in 2002.

That was a significant moment in the history of HIMSS, according to President and CEO H. Stephen Lieber, CAE, who says HIMSS had to reinvent itself in order to serve its original stakeholders — individual members — and its new ones: corporate members.

"Once you start down a path like that, where you are serving two very different kinds of members, your thinking starts to change," Lieber says. "Rather than trying to allocate our resources and split them up serving individual, nonprofit and company members, it liberated us to focus on the reasons why organizations and individuals work in the health care sector, and on what technology can do within health care."

Through a series of mergers and acquisitions like that with CPRI-HOST, HIMSS evolved into what it now calls a "cause-based organization."

"We have, in some respects, redefined ourselves," Lieber continues. "We are not designing ourselves to improve the companies that operate in the space, as a trade association might, nor is the improvement of our members' professional status our primary objective. Our mission is to help our members improve health care through the best use of information technology."

Anyone who's skeptical about the impact of IT on health care should consider the influence of technology on other industries. "The kind of thing HIMSS is advocating in health care is what you already enjoy in every other aspect of your life," says Greenspun, an advisory member of the HIMSS board and co-author of *Reengineering Health Care: A Manifesto for Radically Rethinking Health Care Delivery.* "Do you use OpenTable to make restaurant reservations? Yes, so why don't more of us have online scheduling for appointments with our doctor? Can you use any ATM in the world to get access to local currency? Yes, so why can't we walk into a drug store in another city and get access to our prescriptions?

Health IT: By the Numbers

98,000

The number of people who die each year as a result of preventable medical errors, a major solution to which are EHRs.¹

\$29 billion

The annual cost of preventable medical errors in hospitals nationwide.¹

6.3

The percentage of physicians who report having a "fully functional" EHR system; 20 percent report having a "basic" system.²

1.5

The percentage of hospitals — half of which are government hospitals — that have integrated IT systems.³

\$19.2 billion

The amount earmarked for health IT in the American Recovery and Reinvestment Act, which will be used to incentivize the adoption and use of EHRs.⁴

404,000

The number of medical professionals eligible for meaningful use incentives in 2011; the government predicts that between 10 percent and 36 percent will adopt EHRs in 2011, 15 percent to 44 percent in 2013 and 21 percent to 53 percent in 2015.⁵

*Sources: ¹Centers for Disease Control and Prevention, ² U.S. Department of Health and Human Services, ³ Washington Monthly, ⁴ HIMSS, ⁵ Institute of Medicine

Can you show up at an airline kiosk and swipe your credit card to magically access everything about your trip? Yes, so why do you have to fill out all the same forms every time you go from a hospital to a doctor's office to a specialist? Health care is lagging other industries by over a decade in how it handles information, even though it's an incredibly information-intensive industry."

Thanks to health IT, clinicians in the future will be able to monitor their patients' diet and exercise habits while patients will receive automatic reminders when it's time for a vaccination or colonoscopy.

"Health care is really the last major industry that has taken advantage of technology." Roberts says. "A few years from now everyone will have electronic health information that in a private and secure way will move with them wherever they happen to be so they can get the best care possible, so their doctors can access the information they need, and so there won't be the continued filling out of forms and applications that drives patients crazy."

Although it's still years away, meaningful use will help providers inch ever closer to that type of care. "It's not enough to get us there, but it may be enough to get us to a tipping point," Greenspun says. "Right now there's no big consumer backlash over the fact that most of us can't access our records or schedule our appointments online. That's because most people who are tech-savvy enough to care are pretty healthy right now. But when the average person with a smartphone requires more care and is confronted with the Flintstones' version of health care information, they're not going to tolerate it."

Prescription: Information

Because it will help catalyze the health IT revolution, meaningful use is critically important, according to HIMSS member Bert Reese, vice president and chief information officer at Sentara Healthcare in Norfolk, Va. His employer, which operates more than 100 care giving sites in Virginia and North Carolina, began implementing EHRs in 2007, two years before the HITECH Act, and already is generating \$41 million a year in either new revenue or financial savings because of them.

"We know for a fact that if you do them correctly, electronic health records improve clinical quality and reduce health care costs," Reese says.

By persuading them to adopt and use EHRs, meaningful

use will help more hospitals and providers realize the benefits that Sentara already is enjoying. The key is having enough information to procure technology correctly and implement it effectively. That's where HIMSS comes in.

"HIMSS was prepared in a couple different areas," Smith says. "One was content. We had tools and resources prepared so that end-users could easily access them and begin conversations that would help them make informed decisions. We also were at the ready when it came to education; when the draft regulation and final rule came out around Stage 1 of meaningful use, we did deep-dive analysis, live education and webinars so our members could get the facts about what the regulation says, what the deadlines are and what they need to do to be in compliance."

Really, HIMSS' education campaign began before the HITECH Act. The organization established its public policy function in 2000 and opened a Washington, D.C., office in 2003, when it also launched its Legislative Action Center, an online tool that automates electronic communication between HIMSS members and Congress. Since then, it's facilitated health IT education for Congressional staffers, hosted monthly networking luncheons for members featuring government guest speakers and sponsored an annual "National Health IT Week" to raise health IT awareness on Capitol Hill.

Those activities and others positioned HIMSS in 2008 to issue a call to action for President-Elect Obama and the new Congress. "In that call to action, we specifically called for financial incentives to jumpstart electronic health records," Roberts says. "We did a lot of information sharing and knowledge building on Capitol Hill, including during the Bush Administration. So when the federal government decided the economy was failing and something had to be done, key



decision-makers said electronic health records was a key area to focus on."

When its outreach efforts succeeded in the form of meaningful use, HIMSS shifted its education from lawmakers to clinicians. "When the stimulus hit, they really stepped up their game and provided their members with a critical service of information flow, training and education," Greenspun says.

Spearheading many of HIMSS' meaningful use initiatives was Vice President of Healthcare Information Systems Patricia Wise, RN, MS, MA, FHIMSS, who managed the team in charge of meaningful use content, resources and tools. Within six weeks of the HITECH Act's passage in February 2009, that team had already created several fact sheets and summaries about the content and implications of the legislation. When CMS introduced its NPRM on meaningful use Stage 1 the following December, the team set to work reading, understanding, synthesizing and analyzing the draft regulation, then producing a series of FAQs, executive summaries and indepth articles designed to interpret discrete aspects of it for individual audiences, such as hospitals, ambulatory providers, nurses and physicians.

Meanwhile, Roberts and Wise were collaborating with volunteer leaders on an official response to the NPRM, which HIMSS submitted on behalf of its members during the public comment period in spring 2010.

When CMS released the final Stage 1 rule in July 2010, the process of creating content began again, this time focusing on changes between the draft and 800-page final regulation.

By September 2010, HIMSS had aggregated and produced an entire library of meaningful use content. Under Wise's direction, it therefore launched a new website called Meaningful Use OneSource. "It was clear that we needed a place for our members to go to get all this information, so we set up Meaningful Use OneSource, which is a massive taxonomy on all things meaningful use," Wise says.

Officially launched in December 2010, the website which is continually refreshed with new and updated content — features more than 400 documents and source links related to meaningful use, all of which have been vetted by subject matter experts. "We're averaging between 2,000 and 2,500 visits a week, which we consider phenomenal," says Wise. "Our normal website visitor stays less than a minute; our visitors on Meaningful Use OneSource stay an average of eight minutes, which means they're finding what they want and settling down to read it. We consider that to be a very good sign that we've met our members' needs."

While Wise's team was developing content, Vice President of Professional Development JoAnn Klinedinst, CPHIMS, PMP, FHIMSS, was organizing live and virtual education. Both this year and last, for instance, she included in the HIMSS Virtual Conference & Expo — held twice a year, in June and November — a learning track dedicated to meaningful use. In January 2010 she similarly organized a sixweek series of meaningful use webinars that consistently drew more than 1,000 members per event. More recently, the HIMSS11 Annual Conference & Exhibition in February 2011 featured 242 education sessions — 48 of which were focused on meaningful use.

"We survey our audiences at the conclusion of each of our events," Klinedinst says. "On a scale of one to five, our meaningful use sessions consistently score upwards of five."

A Healthy Future

According to Reese, there's a reason that HIMSS' online content gets so many hits, and that its education earns such high marks: Like the health IT that's being regulated, it's both meaningful and useful.

"I have a couple of staff who keep a close eye on meaningful use, and their two checkpoints are HIMSS and our vendors," Reese says. "Normally, HIMSS leads all our discussions."

It's that position as a thought leader that's allowed HIMSS to not only retain its relevance during industry transformation, but also enhance it. "Our membership has actually grown," Smith says; according to HIMSS, the society's membership has grown 54 percent since July 2009. "One reason is because of the Recovery Act; we're viewed as a very credible source for comprehensive knowledge."

It's a hard-won reputation that HIMSS plans to retain as the government moves beyond Stage 1 of meaningful use — CMS will begin making incentive payments to eligible hospitals, physicians and other providers this month — toward Stages 2 and 3.

"We expect that sometime late this fall we'll see the proposed regulation for Stage 2 of meaningful use, which will start this whole process over again," says Wise, who marvels at the volume of information HIMSS has provided — and continues providing — on behalf of its cause. "The HITECH Act provided \$20 billion of incentives for health IT. It was a tidal wave for the industry. Our response needed to reflect that this was the industry's most significant legislation — and then regulation — in memory. I think it did." ☑

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THE JUNE/JULY 2011 SIGNATURE STORY features the American Academy of Pediatrics' Helping Babies Breathe training program, which gives health care providers and birth attendants in developing countries the essential skills of newborn resuscitation — ultimately reducing infant mortality. Birth asphyxia is a major cause of death across the world; it kills more babies every year than malaria and five times as many as AIDS. And while in developed countries the infant death rate is low due to technology, in the developing world it is a major problem for health care providers. Validation and pilot testing of the Helping Babies Breathe materials took place in five pilot sites in Kenya, India, Pakistan, Bangladesh, and Tanzania. Results from the data analysis are informing program and curriculum enhancements, identifying knowledge gaps, and identifying areas for future research.