Stimulus Bill Promises a New Era In Digital Health Care
But American Recovery and Reinvestment Act Gives Pharmacies Short Shrift

Stephen Barlas

My personal physician, let’s call him Dr. Smith, is a young, enthusiastic guy whose eyes light up when he talks about his two-year-old son who just taught himself to gargle. The kid thinks he is a young Robin Williams. The toddler comedian likes to throw back his head at the dinner table, juggle some orange juice in his mouth, and see if his parents break into guffaws.

Believe it or not, Dr. Smith is just as animated when he’s asked about electronic health records (EHRs) and electronic prescribing; however, his tone quickly changes from pleasure to pain. His office has experimented with all sorts of off-the-shelf EHR software but to no avail. His medium-sized practice in well-off Arlington, Virginia, has had to hire an information technology (IT) guru with a background in medical records to develop a customized EHR system. My doctor laughs derisively when I ask him about the $17.2 billion in Medicare and Medicaid health IT (HIT) incentive money for physicians and hospitals in the stimulus package Congress passed in February 2009. He doesn’t think it will convince many physicians to jump into the HIT arena, especially with standards and certification in such a mess.

The doctor’s frustration is palpable when he pulls a prescription pad from his pocket. His practice does have legacy e-prescribing software. He can send electronic prescriptions through the Surescripts network—the only e-prescribing highway available—to all local pharmacies; no problem here. But if a patient comes in and wants a 90-day supply of a medication from a mail-order pharmacy, that’s a no-go. His software does not allow him to get onto the Surescripts highway to reach Medco Health Solutions, CVS Caremark, and other big prescription benefit managers (PBMs) and mail-order pharmacies.

EHRs and e-prescribing have been held up as saviors of our medical system—literally and figuratively—since a National Academy of Sciences report in 1999 detailed the average number of deaths from hospital errors in the U.S. Most of these deaths were the result of botched prescriptions with faulty handwriting or other similar deficiencies. Through the early part of the 21st century, EHRs gained momentum in the public’s mind, if not the physicians’ office, as a way to save time and resources and as a gateway to better health outcomes more broadly, not just as a way to reduce prescription errors. President Obama provided the most recent rationale for EHRs when he linked them to job creation, mostly from sales of e-health software and hardware.

The President’s support of EHRs catapulted previously land-locked congressional legislation onto the deck of the fast-moving stimulus bill. Known as the American Recovery and Reinvestment Act (ARRA), the stimulus bill aims to create a new digital health nirvana in which federal dollars would be pumped into physician practices and hospitals (but not pharmacies) so that they can purchase off-the-shelf software systems that will become magically robust and, at long last, interoperable.

The ARRA has three general components:

- $19.2 billion in funding ($17.2 billion plus another $2 billion going to the National Coordinator for Health Information Technology)
- establishment of voluntary standards
- privacy provisions

Some top health care executives have heralded the arrival of the new stimulus-funded era. David B. Snow, Jr., MHCA, Chief Executive Officer (CEO) of Medco Health Solutions, Inc.—the mail-order company to which my physician cannot connect electronically—delivered a speech on March 18 at the American Enterprise Institute, a mainline think tank, entitled “Health IT: Empowering Precision Medicine.” The Pharmaceutical Care Management Association (PCMA) issued a study in March that predicted that HIT funding in the ARRA would increase the number of prescribers using e-prescribing to more than 75% over the next five years.

But a cow has more chance of jumping over the moon than the PCMA’s guesstimate has of being correct. A June 2008 report from the eHealth Initiative and the Center for Improving Medication Management estimated that only 6% of ambulatory health care providers are using e-prescribing, including those using EHRs and stand-alone e-prescribing solutions. The PCMA’s estimate is close to astounding. Adoption by hospitals and retail pharmacies isn’t much more impressive.

Karl F. Gumpper, RPh, BCNSP, BCPS, Director of the Section of Pharmacy Informatics & Technology of the American Society of Health-System Pharmacists (ASHP), says that an association survey at the end of 2007 found that 20% of hospitals had some e-prescribing capability.

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“Whether they are using that capability to its full extent, for example, by connecting to outside retail pharmacies or doctors’ offices, we don’t know,” he adds.

In-patient hospital pharmacies are almost totally in the dark, according to Michael Van Ornum, RPh, RN, BCPS, a consulting clinical pharmacist at Greater Rochester Independent Practice Association and author of a book on e-prescribing. In-patient pharmacies connect to physicians making rounds via computerized provider order entry (CPOE) systems.

“They don’t connect to the outside world via Surescripts, so medication history is a weak spot, for example,” he explains.

Almost all chain pharmacies have pharmacy dispensing systems with e-prescribing capability, but this is not true in smaller, independent pharmacies. The eHealth Initiative report said approximately 73% of independent pharmacies are not connected even though most of them are using certified software. Mr. Van Ornum describes the dilemma of an owner of an independent pharmacy who had to choose whether or not to buy a pharmacy dispensing system that cost $10,000 extra for an e-prescribing component.

“He said he wasn’t going to pay an extra $10,000 just for the privilege of paying Surescripts an extra 25 to 35 cents per transaction,” Mr. Van Ornum relates.

Surescripts provides a valuable service to pharmacies and physicians (who do not pay a per-transaction cost) by ensuring that some (but often not all) information about a patient’s medication history, insurance benefits, and formulary flexibility is available to the physician or the pharmacy when the patient is standing in front of them. Although connectivity to Surescripts saves providers a considerable amount of time, Mr. Van Ornum says that the pharmacy costs can add up to the equivalent of a full-time technician. Such an expense offsets the time savings gained by the pharmacy.

That is where e-prescribing adoption stands today. At the end of 2007, according to the eHealth report, only 2% of the 1.47 billion prescriptions each year that were eligible to be sent electronically were sent that way. Progress has been made, no question, but the task of completing the job is enormous. This is where the stimulus bill comes in, although there are many skeptics.

Kevin Hutchinson, President and CEO of Prematics, Inc., and founding CEO of Surescripts, says that the incentive funds for physicians and hospitals are a positive step. However, the one-year injection of money won’t be enough to encourage many physicians in small and medium-sized practices—like my physician—to fully embrace e-prescribing, much less full-blown EHR systems. He explains:

Two things have to happen first. Health care reform has to change the way reimbursement is done so [that] doctors see that the way they deliver care is aligned with the way they get paid for care. Second, physicians have to be sure that investments they make in 2009 will be reimbursed with stimulus money, which first becomes available in 2011. Because these kinds of payment promises have been broken in the past, there is a little bit of skepticism on the part of physicians.

Even if the money is there in 2011 and beyond, a study released in March by Avalere Health, a consulting firm in Washington, DC, suggested that absent a leap of faith that new HIT systems would increase their efficiency, up to 50% of physicians in solo practice or in small groups perceived themselves as better off financially by refusing to adopt e-prescribing and EHRs and forgoing HIT funding in the stimulus bill; they would instead pay a penalty for noncompliance.

The stimulus package would pay physicians incentives for five years; the total amount would depend on which year they first complied with certain standards. If that first year were 2011 or 2012, the doctors would get $44,000 over five years. Total payments would be $3,000 less if they implemented e-prescribing in 2013, 2014, or 2015. The Avalere researchers found that solo practitioners and physicians in small group practices would need to spend approximately $124,000 over the five-year period of 2011 to 2015 to adopt EHRs.

Subtracting the potential $44,000 in federal incentive payments, the resulting financial cost would be $70,000, or an average of $14,000 a year. This represents about 8% of this physician’s annual Medicare receipts, contrasted with the legislation’s provisions to impose an $8,500 penalty on non-adopters of e-prescribing. The penalties would be the result of reduced Medicare fees for non-adopters in 2015 and beyond.

Unlike physicians and hospitals, pharmacies receive no direct funding from the stimulus bill, even though, unlike physicians, they will incur substantial recurring costs from Surescript’s connection charges.

Brian Morris, RPh, and Director of Product Management and Public Affairs at McKesson Pharmacy Systems, says, “Pharmacies do not see the same opportunities and incentives as physicians.”

Today, a pharmacy management system could cost a pharmacy more than $10,000 depending on hardware, training, and implementation requirements.

Some stimulus funding could flow indirectly to pharmacies, however. The ARRA gives $2 billion to the Office of the National Coordinator for Health Information Technology (ONC) for a basket of loan and grant programs, including one to establish regional implementation centers that provide guidance to physicians and pharmacies. The latter provision is why Mark Kinney, RPh, Vice President of Government Affairs for the Independent Pharmacy Cooperative (whose members are generally small pharmacies in more rural areas) thinks that the legislation will be very valuable.

Dan Rode, MBA, Vice President of Policy and Government Relations at the American Health Information Management Association, describes those “regional exchanges” as HIT versions of the U.S. Department of Agriculture’s extension center offices. They would ostensibly be staffed with HIT experts who would venture into physicians’ offices and pharmacies and help with e-prescribing and implementing EHR systems. This would be a free service.

“I don’t imagine the consultants industry is too happy about this,” Dan Rode jokes.

But physicians and pharmacies need more than money to convince them to make substantial e-prescribing investments. They need the software to be mature and interoperable, which is currently far from the case. The stimulus bill is supposed to help here too.

On standards and certification, the stimulus bill says that the
Department of Health and Human Services (DHHS) Secretary has to adopt an initial set of HIT standards and certification procedures by December 31, 2009. However, the ARRA is silent on how detailed or far-reaching those new DHHS standards should be; it is also mute on whether the Obama DHHS will endorse the standards already adopted by the Bush administration-endorsed Healthcare Information Technologies Standards Panel (HITSP) and the certifications based on those standards, as issued by the Certification Commission for Healthcare Information Technology (CCHIT) at the end of this year. In fact, the bill’s silence on that topic and its creation of a new broad-based standards committee to advise DHHS was, to some extent, a repudiation of the fractured, confusing standards and certification-setting system endorsed by the well-meaning Bush administration, which had outsourced the work to the HITSP and CCHIT. These two private-sector groups are heavily influenced by software vendors.

Even if new DHHS Secretary Kathleen Sebelius, MPA, endorses the CCHIT certification process at the end of 2009 (which is likely), that will not quiet the concerns of either physicians or pharmacies. The CCHIT has been certifying EHR systems but not stand-alone e-prescribing systems, which would obviously be cheaper and would make it easier for physicians and pharmacies to get on board. All EHR systems that have been certified by the CCHIT have e-prescribing functionality, but that functionality has considerable limits.

For the most part, the earlier e-prescribing systems based their functions on the Medicare e-prescribing “foundation” standards adopted in 2006. However, the first-generation systems certified by CCHIT, which are now being used by physicians and pharmacies, do not necessarily allow physicians to connect to all pharmacies, as in the case of my personal physician. Some EHR systems connect only to retail pharmacies, others only to mail-order pharmacies. Even rival software packages connecting physicians to mail-order pharmacies provide different levels of data, depending on what Medco, CVS Caremark, and others agree to release.

Generally, there is no ability to look up formularies in real time. In part, those shortcomings were the result of the cost of the certification process; some vendors simply could not pay the CCHIT charge for complete certification. In addition, the mail-order pharmacies really saw the light on e-prescribing only a few years ago. They were late to the party, according to Prematics CEO Hutchinson, who says that this has changed markedly now. Nonetheless, there are all these legacy EHR systems out there that cannot meet the new standards set by the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA).

This is the Medicare reform legislation that provides Medicare payment incentives to physicians for e-prescribing. That bill specified three new e-prescribing standards, in addition to the three “foundation” standards: (1) formulary and benefit transactions, (2) medication history transactions, and (3) fill status notifications.

Although CHIT will have 50 full EHR systems certified to the entire six-standard suite by the end of June, no stand-alone e-prescribing systems have been certified by CCHIT. However, John Morrissey, a CCHIT spokesperson, says that stand-alone systems will be certified in the fall of 2009, again based on the Medicare standards.

So what happens to a physician like mine with a legacy EHR system after his software vendor has the latest version, which is compliant with the three new Medicare standards, certified by the CCHIT?

Theoretically, the legacy system can be upgraded at no cost, based on the initial contract with the software vendor. But Mr. Hutchinson claims that upgrades can present challenges as a result of additional new features that can adjust the workflow of users, “sometimes expectantly and sometimes not. It is important that training follow significant upgrades, especially one that will add true electronic prescribing capabilities.”

Yet even with the addition of three new standards in April 2009, the Medicare Part D suite, now being used by the CCHIT, vendors and physicians are still skeptical. That is because the suite omits three standards that Medicare pilot-tested in 2006 but found wanting. Probably the most significant one is the standard for RxNorm drug nomenclature, developed and maintained by the National Library of Medicine (NLM).

In the March–April 2009 issue of Health Affairs, Maria Friedman, Anthony Schueth, and Douglas S. Bell wrote that the latest Medicare e-prescribing standard “will be critical for driving more advanced functionality and e-prescribing adoption by payers and vendors that have not yet fully participated in e-prescribing.”

However, they add: “On the other hand, the fact that three other standards were pilot-tested but not adopted may have created a perception that e-prescribing is generally not mature.”

“There are a lot of people on the RxNorm bandwagon,” acknowledges Mr. Hutchinson.

Moreover, the new Medicare standard, based on the National Council for Prescription Drug Programs (NCPDP) SCRIPT 8.1 standard, does not accommodate e-prescribing in long-term-care facilities, in which specialized long-term care pharmacies are located off-site and drugs are delivered to the facility. The NCPDP has made changes to standard 8.1 to accommodate long-term care facilities; the new standard is 10.5. The problem is that vendors are using NCPDP SCRIPT 8.1 as a yardstick. If standard 10.5 turns out to be compatible with earlier versions, long-term care facilities and their pharmacies may be able to use vendor systems certified to prior version 8.1. A number of different players will be involved in making that “backwards-compatible” decision, meaning that it is going to take a considerable amount of time.

Although the CCHIT’s certification of physician systems may leave something to be desired, its certification of pharmacy systems is nonexistent. Surescripts certifies pharmacy e-prescribing software products that use its network; a physician-dispensing system without that certification is useless for e-prescribing. That certification is based on compliance with NCPDP SCRIPT 8.1. Like physicians, pharmacies also face challenges when a vendor certifies the newest version of a pharmacy management system to standard 8.1; legacy systems must then be upgraded.

At least CCHIT has had the federal government’s imprimatur. The DHHS has never blessed Surescripts. McKesson’s Brian Morris thinks that CCHIT could extend its reach to pharmacy systems under the ARRA and that national standards could prevent adoption impediments arising from in-
terstate differences. Several states such as Ohio and New York, for example, have their own pharmacy system certification process with requirements that aren’t in harmony with those of other states and industry standards.

The stimulus bill is silent about the Drug Enforcement Agency’s (DEA’s) prohibition against e-prescribing of controlled substances. Those drugs account for about 20% of all prescriptions, according to the report from the eHealth Initiative. The DEA has proposed a rule that would ease its restrictions against e-prescribing.

Maria Friedman, one of the authors of the *Health Affairs* article and a former Medicare official, says that the DEA and DHHS are currently arguing over the proposed rule, which many pharmacy and physician groups have criticized. Privacy and security concerns factor into the DEA rule-making, as they do into the stimulus provisions affecting the Health Insurance Portability and Accountability Act (HIPAA).

The ARRA expands HIPAA protections for individuals. These new privacy requirements in some cases would force EHRs and e-prescribing systems to contain functionality beyond what is required by the Medicare Part D standards. For example, Section 14405 of the ARRA expands HIPAA to allow patients with health insurance to pay for a test with cash and to instruct physicians not to report the test results to the patient’s employer or medical insurance company. Currently under HIPAA, physicians have no choice and must report the results. In the future, physicians and pharmacies would be able to segregate patient information that does not get sent to the payer.

“That complicates things, to be honest,” states Dan Rode, who notes that this provision is one of many that will be up for grabs during the DHHS rule-making process that will unfold this year. He adds:

It is way too early to know whether this bill will positively [affect] innovation. But we believe that there still is more needed than what the stimulus bill provides to achieve interoperability. The bill is where Congress left us on February 17. We will move forward.

REFERENCE