touch BRIEFINGS

BUSINESS BRIEFING

US Healthcare Strategies 2005

e-Prescribing Update – A Physician's Perspective on Why Adoption is Improving but is Still Unnecessarily Slow

a report by
Allan M Weinstein, **MD**

www.touchbriefings.com

e-Prescribing Update – A Physician's Perspective on Why Adoption is Improving but is Still Unnecessarily Slow

a report by
Allan M Weinstein, MD

Allan M Weinstein, MD, is the author of the best-selling book *Asthma: The Complete Guide to Self-Management of Asthma and Allergies For Patients and Their Families* (McGraw-Hill 1987, Random House/Ballantine 1989). Dr Weinstein is President and Co-founder of J-Med Pharmaceuticals, a 20-year-old intellectual property pharmaceutical company, as well as Immunomatrix, Inc., a 10-year-old biotechnology company focused on rapid diagnostic testing and proteomics. A former Fellow at the National Jewish Hospital/National Asthma Center in Denver, Dr Weinstein is a Board-certified practicing asthma and allergy specialist in Washington, DC.

On April 9 2002, Health and Human Services (HHS) Secretary, Tommy Thompson, walked into the Giant Pharmacy on East-West Highway in Washington, DC to view OnCallData™, the first true e-prescribing system. The message was clear: patient safety comes first and the time has come to eliminate errors in the prescription-writing process. There are too many look-alike and sound-alike drug names, and illegible handwriting – once the bond linking the unique communication between the doctor and pharmacist – has now been exposed as one of the contributing factors resulting in more than eight million adverse drug events each year.

The problems of prescription inaccuracy, drug interactions, and medication errors are now well documented. These preventable errors not only take the lives of 7,000 Americans each year, but cost American taxpayers US$77 billion annually, according to the Institute of Medicine (IOM).

The goal of the Giant Pharmacy initiative was to put in place a system whereby a prescription can be sent bi-directionally from the doctor's desktop or hand-held computer directly into the practice management system in the pharmacy, thereby avoiding the need to interpret a handwritten or verbal prescription. In reverse, a refill request can be handled in seconds without the need for a phonecall or fax. For pharmacists, who spend as much as one-third of their time on the phone, the result would be more time available for counseling patients. The practicing physician also saves time, avoiding the onslaught of telephone calls and faxes that necessitates hiring additional staff or over-burdening existing staff members. Patients avoid long waits in the pharmacy as all the information required by the pharmacist to fill the prescription is provided on the electronic version. Giant Pharmacy made this commitment – their best effort to have the prescription ready when the patient arrives at the pharmacy. Russ Fair, the head of pharmacy operations at Giant, had the same goal as Tommy Thompson – the time had come to take leadership in patient safety. National Data Corporation (NDC) Health made sure that its practice management system was able to accommodate electronic prescribing and committed to link its 100,000 physician customers.

With the announcement of the formation of RxHub® – the gateway originated by the major pharmacy benefit management companies (PBMs) (Advance PCS, now part of Caremark, ExpressScripts, and MedcoHealth), and SureScripts thereafter (the gateway into pharmacy formed by the National Association of Chain Drug Stores (NACDS) and the National Community Pharmacists Association (NCPA)) – further pilot programs were started. Surescripts' launch was in Rhode Island, in conjunction with the Rhode Island Quality Institute (RIQI) Lifespan Health System and OnCallData. Multiple pharmacy chains and independent pharmacies participated, beginning with Brooks, CVS, and Walgreens. Anchor Medical Primary Care, one of the early pilot adopters who used OnCallData, found that they saved approximately 10 minutes per renewal. They were able to redeploy the nurse practitioner coordinating their renewal process to assist the physicians, thereby gaining an extra full-time employee (FTE). Although it was initially thought that renewals would be the key driver for physician adoption of e-prescribing, a Giant Pharmacy study one year later showed that most e-prescribing doctors were actually sending new electronic prescriptions routinely.

RxHub focused its efforts on providing formulary information, eligibility, and medication history directly from the PBM, and routing prescriptions primarily to mail order. Although SureScripts and RxHub were initially competitive, their services are unique and have become complementary, providing additional information for the physician. As a result of connectivity to both RxHub and SureScripts (either directly or via NDCHealth), a connected electronic prescribing system can undertake realtime eligibility checks and realtime formulary coordination (with displays of alternative generic medication choices), and route the prescription to over 50,000 pharmacies (via SureScripts) and the major PBMs and mail order pharmacies (via RxHub).

The payers themselves, especially Tufts and BlueCross Blue Shield of Massachusetts, have taken leadership in encouraging physicians to adopt e-prescribing. The eRx Collaborative began with the Zixcorp application, Pocketscripts. The benefits of e-prescribing

were studied with analysis of time savings, use of generic alternatives to brand-name medications (by providing formulary and alternatives), and healthcare outcomes. BlueCross Blue Shield plans are evaluating the feasibility of carrying out similar programs around the country.

Awareness of the benefits of e-prescribing has taken a leap forward with Centers for Medicare and Medicaid Services (CMS) administrator Mark McClellan's leadership and commitment to accelerating the pace of e-prescribing, with regard to the new Medicare benefit for senior citizens. Although e-prescribing was not a federal mandate for physicians in 2004, there was worthwhile debate that created greater awareness among physicians, lead by the e-Health Initiative and its founder Janet Marchebroda.

There were a number of myths that were also perpetuated in 2004 that still persist, including the following five perceived obstacles that were presented in the *American Management Association® (AMA)* news in May 2004:

- cost – physicians cannot afford the technology;
- no direct benefit to doctors;
- poorly designed technology that is less efficient than paper-based systems;
- lack of interoperability; and
- regulations that ban or can be interpreted to ban e-prescribing.

In response:

- In 2004, many e-prescribing solutions were given to the physician for free in order for prescription-writing companies to gain competitive advantage and market share – even with today's pricing averaging US$300 to US$500 per year (if not sponsored by a payer to accelerate the adoption of e-prescribing), the actual cost is not a key factor today. It is unlikely that the payer will continue to pay for physician adoption long-term, unless linkage to pay-for-performance programs – now in their infancy, providing physicians with incentives for certain disease management or outcome performance – becomes the norm. As a result, over the long term, physicians will need to be convinced that e-prescribing tools assist them in gathering information that will lead to improved decision-making, especially in a mobile environment.

- The benefits to the doctor are greater efficiency, which has been shown in an array of studies carried out by several e-prescribing systems, and enhanced patient safety. This leads to a potential reduction in liability. Malpractice insurers are beginning to recognise the safety benefits of e-prescribing and offer doctors using e-prescribing systems reductions in their malpractice insurance, which move then offsets the cost of the technology. Savings on staff time and expense is a clear-cut win for the physician.

- The design and functionality of many e-prescribing systems are routinely evaluated, with hundreds of doctors providing their input. OnCallData, for example, updates its system every other week, often as a result of the suggestions of its clients.

- Interoperability concerns are justified and additional efforts are still needed, but some progress has been made. This takes time and requires partnerships among companies that do not traditionally work together. OnCallData has had a long-standing working relationship with major physician practice management system vendors and major hospitals, such as Lifespan in Rhode Island. The work that Lifespan and OnCallData have done together allows OnCallData to connect hospitals elsewhere in significantly reduced time. Recent efforts among standards organizations such as the National Council for Prescription Drug Programs (NCPDP), National Committee on Vital and Health Statistics (NCVHS), and the federal government also prioritize interoperability. Although interoperability takes time to create, it is worth the effort, as it translates to other systems around the country.

- State regulations are favorable to electronic prescribing in 39 states, and many states are progressing to make electronic prescribing a reality – a handful of states currently have unfavorable legislation (which may change shortly) as per the SureScripts roadmap.

In the March 21 2005 issue of *Health Data Management*, Donald Gravlin, Vice President and Chief Technology Officer (CTO) of the health payer practice at New York-based consulting firm Capgemini, states:

> *"Interfacing e-prescribing and practice management systems are crucial for the long-term success of e-prescribing … without interfaces, physicians are never going to get the full advantages of e-prescribing."*

The logic behind this statement goes to the heart of the delay in the uptake of e-prescribing solutions. Physicians do not have the time to input the patient name and other demographic information twice. Although many e-prescribing solutions provide one-time demographic downloads, the physician still has to input a new patient and keep the system updated. OnCallData provides its application to various

physician's office management and medical information systems (POMIS) vendors on an exclusive basis. OnCallData software is inside NDCHealth's POMIS software Medisoft, Lytec and Concept, Companion technologies, and CMHC. These software partnerships (up to 165,000 potential physicians) provide the physician and their staff with a realtime interface and, often, single sign-on with OnCallData inside. Without integration of the e-prescriber, 'free' is not good enough for the doctor – the reason many of the payer-sponsored programs have lagged. In the long term, it is unlikely that the doctor will leave his/her POMIS or electronic medical record (EMR) environment unless the POMIS or EMR vendor does not have a product that meets the physician's needs. The opportunity to maintain the relationship with the physician and have a presence on the doctor's desktop is a unique long-term opportunity.

With the focus on EMR today, stand-alone script-writers are often overlooked, which is a mistake. The move to an EMR is a time-consuming and costly decision for a physician – one that should be taken slowly and carefully. e-Prescribing provides a logical first step on the roadmap to an EMR, and provides critical clinical content at the point of decision-making to the physician, with minimal investment in time and money. The original goals of e-prescribing can be accomplished today, and can be accomplished quickly with strategic alliances, including payers and pharmaceutical companies, to create greater physician awareness. Patient safety is what motivated Tommy Thompson to visit a local Giant Pharmacy in 2002. The benefits of e-prescribing should not be delayed and it should not be put on the timeline of an EMR decision. If e-prescribing is looked at as another feature of the EMR and not understood as a specialty unto itself that requires routine updates on the drug database and formulary side, the opportunity to lock-in the original goal 'safety first' may be missed. Often, a careful look at the prescription-writing capability of many current EMR products points many physicians in the direction of a prescription-writer that can coordinate with an EMR. The advantage is a product that has the connectivity features of an updated scriptwriter (to SureScripts via NDCHealth or to SureScripts directly as well as RxHub), and the updated versions of the drug database to carry out drug–drug and drug–allergy interactions that can work well together.

The next logical step for e-prescribing companies is to add other features and functionality, such as evidence-based decision support. Coordinating the patient's problem list, active medications, and formulary with new evidence-based tools allows physicians to apply state-of-the art information to the medication choices for each patient. For example, if an asthma patient is routinely obtaining a bronchodilator such as an albuterol inhaler, this should alert the doctor that a preventive medication should be ordered. The National Heart, Blood and Lung Institute (NHLBI) has put out these guidelines for several years, but the overall outlook for asthma patients has not changed. The promise of being able to coordinate with patients and emphasize the importance of preventive medications for asthma will help to keep patients out of the hospital. Interestingly, after the patient leaves the doctor's office, the doctor often has little or no feedback. Out of the blue they might call to request a rescue asthma inhaler; by having the patient's medication history available while the patient is on the phone, counseling is much easier. In the case of an asthma patient, guiding them to preventive medication may well avoid a hospitalization.

The key is to take advantage of what is available today – it needs to be kept simple so it can be deployed quickly and be used that same day without need for extensive training. For example, with OnCallData an entire doctor database can be notified within minutes of Vioxx being recalled. By having an Oracle database in the background, help can be given to the doctor to notify all of the patients taking Vioxx, relevant to the recall. In addition, physicians can obtain immediate benefit by being able to document each prescription as a protection against prescription fraud. Malpractice carriers have also begun to encourage physicians to use e-prescribing systems to eliminate errors by offering reductions in the cost for malpractice insurance coverage.

This review of e-prescribing was intended to highlight the fact that solutions currently exist that can have an immediate impact on health outcomes. Reducing or eliminating miscommunications between doctor and pharmacist is a good first step that can be accomplished today. Providing the doctor with tools that can help coordinate their patient's medication usage, checking to see if the proper dosing limits are ordered, seeing if there are any allergic reactions between medications, and keeping a watch on the economics of the transaction is a winning combination that can and should be widely implemented immediately. ■