Executive Summary

- Electronic prescribing, or e-prescribing, is the use of computers to improve the safety and efficiency of the prescribing process. Under an e-prescribing system, a care provider—such as a doctor or a nurse practitioner—uses a computer system to enter information about prescription medications that a patient needs, and then electronically transmits that data directly to the pharmacy computer.

- Prescription drugs are a common part of medical treatment. Today, four out of five Americans who visit a doctor leave with a prescription. In 2007, more than 3.5 billion prescriptions were written, and that number is expected to grow to more than 4 billion by 2010. Because of the high number of prescriptions, many errors or other mistakes can occur. Studies indicate that more than 1.5 million Americans are hurt each year by preventable medication errors.

- E-prescribing can lead to a reduction in medication errors and injuries, greater convenience for patients, a more streamlined refill process, better management of medication costs, and healthier patients by helping people remember to take their medications properly.

- E-prescribing also makes it easier for your physician or nurse to access a list of your medications, and the technology can alert them to potential problems such as a drug allergy.

- There are no fees to the patient for e-prescriptions. With e-prescribing, however, a physician may have information at the time of prescribing that enables him or her to select a lower-cost medication that is equally effective so that the patient may have a lower out-of-pocket cost.

- The security and privacy of personal information, whether electronic or on paper, is critically important. Concerns about privacy and security are legitimate, and the health care industry takes them very seriously. E-prescribing complies with the federal privacy law, HIPAA, as well as with stronger state laws.

- To learn which physicians are e-prescribing, find pharmacies that are accepting electronic prescriptions, and more, visit www.LearnAboutEprescriptions.com.
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INTRODUCTION:
WHY IS E-PRESCRIBING IMPORTANT?

Prescription drugs have become an integral part of the medical care that Americans receive. Today, four out of five of Americans who visit a doctor leave with a prescription. In 2007 alone, more than 3.5 billion prescriptions were written, with that number expected to grow to more than 4 billion by 2010.

With such a high volume of prescriptions, there are an increasingly larger number of errors or adverse reactions that occur. A recent report from the nonprofit Institute of Medicine found that more than 1.5 million Americans are injured each year by preventable medication errors.

Errors are caused by miscommunication resulting from illegible handwriting, unclear instructions, unclear telephone or verbal orders, and other ambiguities. To avoid these dangerous and sometimes deadly errors, it is important that we seek new methods for improving safety, avoiding errors, and promoting best practices in prescribing. In fact, in July 2006, the Institute of Medicine recommended that all prescriptions be written electronically by as soon as 2010. While that goal is not likely to be met, progress toward nationwide adoption of the technology is accelerating and is expected to become standard practice in the coming years.

E-prescribing also offers other benefits to patients—increased convenience by having the prescription sent automatically to the pharmacy, thereby avoiding unnecessary trips, as well as improving the ability of a physician to prescribe a drug that is covered by insurance.
FREQUENTLY ASKED QUESTIONS ABOUT E-PRESCRIBING

1. What is e-prescribing?

E-prescribing makes use of computer technology to simplify and improve the traditional paper-based prescribing process. Gradually phasing out the paper prescription pads on which doctors and nurses have handwritten medications for centuries, e-prescribing has care providers enter this same information electronically in a standard format.

Under an e-prescribing system, a care provider such as a doctor or a nurse uses a computer system to enter information about drugs that patients need, and then electronically transmits that data directly to the retail or mail-order pharmacy of the patient’s choice. The pharmacy then receives the prescription and can begin the process of filling immediately.

More advanced e-prescribing systems can help improve care in even more ways. E-prescribing programs can provide detailed drug information to doctors to help them decide what medication is best for patients after reviewing their medical and drug history. The system can also provide warnings about how one drug might affect a patient who is already taking another drug, allergic reactions the patient may have to a certain drug, and whether the prescription makes sense given a patient’s medical history. In this way, e-prescribing can lead to safer, more informed prescribing so that patients get the care that best fits their needs.

E-prescribing can also help a doctor know which drugs are covered by insurance at what levels, including when generic drugs are available or which name-brand drugs are covered by a health plan.

2. Who participates in e-prescribing?

E-prescribing primarily encompasses the relationship between patients, their care providers, and community pharmacies.
3. How does e-prescribing differ from traditional prescription methods?

Most Americans are accustomed to receiving pieces of paper from their doctors with a prescription written on them. Patients take these handwritten prescriptions to their local pharmacy and wait for the pharmacist to fill the prescription.

If a physician instead uses e-prescribing, there is no handwritten paper for the patient to deliver to the pharmacy; everything is done electronically over a secure system in a standard format. With e-prescribing, patients no longer have to make separate trips to drop off and pick up a prescription; it may often be ready when they arrive.

Nearly one-third of new prescriptions are never filled. But new studies have shown that when physicians and pharmacists use e-prescribing instead of traditional paper prescriptions, the number of unfilled prescriptions significantly decreases as it becomes easier for patients to have their prescriptions filled.

4. How does e-prescribing work?

Care providers use different kinds of devices to e-prescribe, including hand-held devices, laptop computers, desktop personal computers, and other technology. After examining a patient and deciding to prescribe a certain drug, the physician will enter information into a device in a standard format. Depending on the capabilities of the e-prescribing system the physician uses, they can often access patients’ medication histories, including drugs that have been prescribed before or medication allergies. Information about insurance coverage for particular drugs is also often available electronically.

Once the physician or nurse practitioner has chosen the appropriate drug, they then transmit the prescription electronically from the doctor’s computer to the pharmacy’s computer, through a private, secure, closed network.

E-prescribing example: When entering a new prescription into the system, a physician might receive an alert warning him or her that a patient had been prescribed that drug two years earlier, and had suffered an adverse reaction. With that knowledge, the physician would be able to adjust his or her decisions to use the computerized input to complement his or her own analysis of the patient’s conditions, and then transmit the prescription electronically to the pharmacy that is convenient for the patient. In the event that the pharmacy a patient prefers cannot accept prescriptions electronically, the physician can either fax it to the pharmacy or print the prescription manually so the patient can take it to the pharmacy.
5. What are the benefits and costs of e-prescribing?

Benefits:

- **Convenience:** With the use of an electronic system, prescriptions should arrive at the pharmacy before a patient arrives, eliminating the need for the patient to show up to drop off the prescription and wait for it to be filled.

- **Streamlined prescription renewal process:** E-prescribing streamlines communication between physicians and pharmacies to renew prescriptions. For example, if the prescription has no more refills, the pharmacy will send an electronic renewal request to the doctor’s computer system. The doctor’s office can respond electronically to approve or deny the request quickly and easily. The patient is much less likely to have to wait for the pharmacist and physician to speak by phone.

- **Improved medication safety:** By entering prescriptions electronically in a standard format, physicians eliminate many of the opportunities for errors, such as illegible handwriting. Physicians are also more likely to have access to their patients’ medication history information, which helps them make safer prescribing decisions and prevents prescribing medications that the patient is allergic to. There is even more benefit when e-prescribing is included in a full electronic health record that allows greater use of decision tools for the health care provider.

- **Better management of medication costs:** E-prescribing systems often can access a patient’s insurance plan information, so that the physician can prescribe the medications that are covered by insurance. This saves the patient money.

Costs:

- **Fees:** There are no fees to the patient for e-prescriptions. Patients pay the same amount in the same way for electronic prescriptions as they do for traditional paper prescriptions. With e-prescribing, however, a physician may have information at the time of prescribing that enables him or her to select a lower-cost medication that is equally effective, so that the patient may have a lower out-of-pocket cost.

- **Care providers cover the costs:** Care providers cover the costs to install the hardware and software used for e-prescribing, train their staff, and maintain their systems.

- **Pharmacies pay the costs:** Pharmacies pay the costs associated with their hardware and software systems and also pay transaction fees based on the number of electronic prescriptions and electronic prescription renewals received.
6. What are the potential drawbacks of e-prescribing?

- Controlled substances: Currently, e-prescribing cannot be used for certain drugs called controlled substances, which are typically used to treat severe pain, such as Oxycontin or Vicodin. Prescriptions for these medications may be written using an e-prescribing system but cannot be transmitted electronically to pharmacies. Typically, physicians will print these prescriptions and sometimes they require the physician’s signature.

- Complacency: Patients, physicians, and pharmacists should not believe that the use of an electronic system eliminates all possibilities for errors. Patients should still be aware of their medication history, and make sure that physicians are aware of all conditions they have, including allergies, and drugs they currently take. E-prescribing supplements the expertise of physicians and normal medical due diligence; it does not eliminate the need for awareness.

- Lack of complete information: E-prescribing systems may not have information on all the medications that a patient is taking, such as over-the-counter drugs. These can cause allergic reactions or other problems that the physician should know about. Patients should inform their health care provider about all the medications they are taking and any problems that they have experienced. Without e-prescribing, it is even more difficult to have an accurate and complete medication history for patients because they may see multiple providers who write prescriptions for them. It is very important to have access to this information to provide the best patient care possible.

7. How widespread is the use of e-prescribing currently?

**Physicians**

Use of e-prescribing is growing quickly and is expected to become standard practice in the next several years. In 2007, more doctors were e-prescribing than in the previous three years combined. By the end of 2008, there are expected to be approximately 85,000 providers e-prescribing. This represents approximately 6% of all office-based physicians.

**Pharmacies**

Nearly three-quarters of all retail pharmacies already accept e-prescriptions through the secure Pharmacy Health Information Exchange, including 97% of all chain pharmacies such as CVS, Walgreens, Wal-Mart, and Rite Aid. Only 27% of the smaller independent pharmacies are currently e-prescribing, due in large part to the costs to the pharmacy. When patients prefer to use a pharmacy that doesn’t yet accept e-prescriptions, physicians are still able to fax the prescription to the pharmacy or print the prescription for the patient to take to the pharmacy of their choice.
Most insurance companies and pharmacy benefits managers also support e-prescribing. They provide the pre-prescribing information, such as medication history, eligibility, formulary, and benefit information, on millions of Americans so that it is ready for the physician to use in selecting the safest, most affordable medications. According to a 2007 Gorman Group study, this pre-prescribing process accounts for 70% of the safety and savings advantages of e-prescribing.

You can find out if your doctor e-prescribes at [http://www.LearnAboutEprescriptions.com](http://www.LearnAboutEprescriptions.com). In general, e-prescribing is more common in cities and with large physician groups, and less common in rural communities and with solo or small physician groups.

8. Where can I go to learn more about e-prescribing?

- [www.LearnAboutEprescriptions.com](http://www.LearnAboutEprescriptions.com). The nation’s pharmacies launched the first ever consumer education campaign on e-prescribing in April 2008 and the campaign’s Web site contains information on which physicians are e-prescribing in each community, which pharmacies are accepting electronic prescriptions, and general information on e-prescribing.
- [http://www.aarp.org/research/technology/webuse/](http://www.aarp.org/research/technology/webuse/). This site from AARP provides information about technology, public views on electronic prescribing (called tele-pharmacy), and other information.
- [http://www.consumerreports.org/health/best-buy-drugs/index.htm](http://www.consumerreports.org/health/best-buy-drugs/index.htm). Consumers Union, the nonprofit publisher of Consumer Reports, launched an education campaign to help consumers talk with their doctor about the safest and most effective drugs.

9. What is being done to ensure security and privacy of prescriptions and personal health information?

The security and privacy of personal information, whether electronic or on paper, are critically important to maintaining a trusted doctor-patient relationship. While many believe electronic data can be more secure than a paper prescription (which can be lost or misplaced), concerns about privacy and security are legitimate, and the health care industry takes them very seriously.

Today, the privacy of a patient’s personal health information, including information sent through e-prescribing, is protected by a federal law as well as state laws. The federal law is the Health Information Portability and Accountability Act (HIPAA). HIPAA requires that your personal health information be shared only for the purpose of providing care for you or for paying your health insurance claims. In addition, many state laws are stronger than the federal privacy law and all health care providers and entities must comply with them. E-prescribing is consistent with these privacy laws.
Give their prescription a head start.

e-prescriptions

• Reduce pharmacy faxes and phone calls
• Streamline the refill authorization process
• Access patient medication history across providers
• Devote more time to patient care

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About the eHealth Initiative

The eHealth Initiative (eHI) and its foundation are independent, nonprofit affiliated organizations whose missions are the same: to drive improvements in the quality, safety, and efficiency of health care through information and information technology.

eHI engages multiple stakeholders, including clinicians, consumer and patient groups, employers, health plans, health care IT suppliers, hospitals and other providers, laboratories, pharmaceutical and medical device manufacturers, pharmacies, public health, and public sector agencies, as well as its growing coalition of more than 250 state, regional, and community-based collaboratives to develop and drive the adoption common principles, policies, and best practices for improving the quality, safety, and effectiveness of America’s health care through information and information technology. Visit them at http://www.ehealthinitiative.org.

About the Center for Improving Medication Management

The Center for Improving Medication Management serves as an industry resource by gathering and disseminating best and worst practices related to technology deployment for electronic medication management, and for leveraging that technology and connectivity to test innovative approaches to improve patient adherence with prescribed medications. The Center was founded by the American Academy of Family Physicians (AAFP), Humana Inc., Intel Corporation, the Medical Group Management Association (MGMA), and SureScripts. More information about The Center is available at http://www.theCIMM.org.