

2008

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National Progress Report  
on E-Prescribing



# National Progress Report on E-Prescribing

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## Surescripts® and the Evolution of E-Prescribing

Surescripts operates the country's largest electronic prescribing network used every day by thousands of physicians, physician assistants, nurse practitioners and other prescribers across all 50 states. The Surescripts network connects prescribers through their choice of e-prescribing software to the nation's major chain pharmacies, the nation's leading payers and independent pharmacies nationwide. The Surescripts network is the backbone that facilitates e-prescribing – a proven process that reduces health care costs, improves patient safety and increases systemic efficiency. Surescripts enables e-prescribing by providing prescribers with secure electronic access to prescription benefit information and patient prescription history and by allowing prescribers to electronically route prescriptions to their patients' pharmacies of choice.



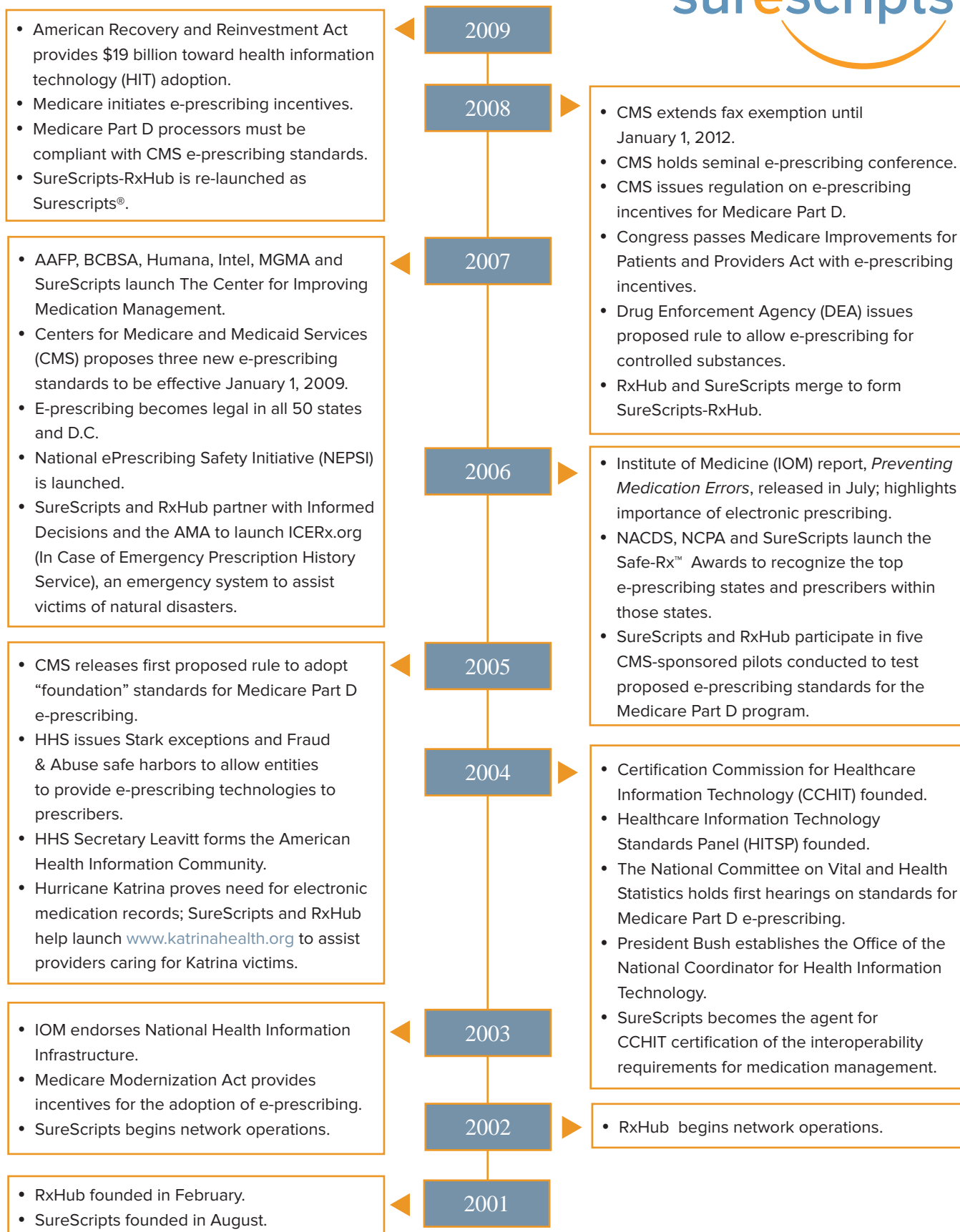
To utilize the Surescripts network, a prescriber, a pharmacy and a payer must use software that has completed the Surescripts certification process. This process ensures that the software is able to send and receive electronic messages in accordance with industry standards. Surescripts has certified more than 200 software applications used by prescribers, pharmacies and payers for e-prescribing. Surescripts provides leadership to governmental and private sector bodies to help establish, implement and evolve the standards needed to securely and effectively exchange prescription information. What's more, Surescripts brings neutrality to e-prescribing by maintaining transparent policies that preserve a prescriber's choice of medication and the patient's choice of pharmacy.

As a private-sector solution founded by the nation's leading pharmacies and pharmacy benefit managers, the scale of the Surescripts network and the growth in e-prescribing are evidence of the speed and effectiveness that can be achieved in applying digital solutions to the U.S. health care system's challenges. The company's leadership collaborates with and provides guidance to national, regional and state health IT initiatives by sharing firsthand experience, statistics, research, case studies and best practices. Surescripts provides resources to physicians, pharmacies and patients through a number of platforms and programs, including The E-Prescribing Resource Center™ ([www.surescripts.com](http://www.surescripts.com)), The Center for Improving Medication Management ([www.TheCIMM.org](http://www.TheCIMM.org)) and the Get Connected program ([www.GetRxConnected.org](http://www.GetRxConnected.org)), and to local communities during times of emergency through In Case of Emergency Prescription History Service ([www.ICERx.org](http://www.ICERx.org)).

Surescripts is the result of a 2008 merger between the country's two leading health information networks: RxHub and SureScripts. RxHub was founded in 2001 by the nation's three largest PBMs – CVS Caremark Corporation, Express Scripts Inc. and Medco Health Solutions, Inc. SureScripts was also formed in 2001, by the National Association of Chain Drug Stores (NACDS) and the National Community Pharmacists Association (NCPA).

Surescripts reduces costs, improves safety and increases efficiency by electronically connecting prescribers, pharmacies, payers and their respective software applications to enable the secure, seamless flow of health and prescription information.

## The Evolution of E-Prescribing



## Executive Summary

Significant growth was seen in the use of three critical steps in the e-prescribing process between 2006 and 2008: prescription benefit, prescription history and prescription routing. Significant growth was also seen in the adoption of this technology by prescribers, by payers and by pharmacies.

### Part 1: Electronic Prescribing Use

- **Total E-Prescribing Message Volume:** E-prescribing message volume doubled between 2007 and 2008 to over 240 million.
- **Prescription Benefit:** Electronic requests for prescription benefit information grew from 37 million in 2007 to 78 million in 2008.
- **Prescription History:** Prescription histories delivered to prescribers grew from over 6 million in 2007 to over 16 million in 2008.
- **Prescription Routing:** Prescriptions routed electronically grew from 29 million in 2007 to 68 million in 2008.
- **EMR vs. Standalone E-Prescribing Software:** Only about 30 percent of electronic medical record (EMR) software is deployed for all three e-prescribing services by the end of 2008, versus about 80 percent of standalone e-prescribing software.



### Part 2: Electronic Prescribing Adoption

- **Prescribers:** The number of prescribers routing prescriptions electronically grew from 36,000 at the end of 2007 to over 74,000 by the end of 2008 – or 12 percent of all office-based prescribers.
- **Payers:** At the end of 2008, Surescripts could provide access to prescription benefit and history information for 65 percent of patients in the U.S.
- **State Medicaid Programs:** At the end of 2008, seven states were connected to the Surescripts network through their PBMs to deliver prescription information for fee-for-service Medicaid patients, with three more in process.
- **Community and Mail Order Pharmacies:** At the end of 2008, approximately 76 percent of community pharmacies in the U.S. were connected for prescription routing and six of the largest mail order pharmacies were able to receive prescriptions electronically.

### Part 3: Analysis — Key Drivers of E-Prescribing in 2008

- Significant attention was focused on e-prescribing at the federal and state policy levels.
- National programs drove e-prescribing and offered practical tools to assist the industry in moving forward.
- E-prescribing adoption accelerated among key groups: payers (including pharmacy benefit managers (PBMs) and Medicaid plans), prescribers and pharmacies.

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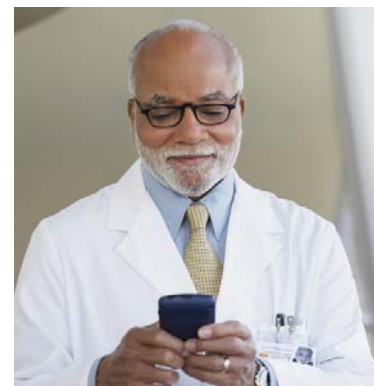
## Part 4: Next Steps

### Surescripts recommends that five actions be taken at the earliest opportunity:

- **Action #1:** Continue to work with the DEA to pass regulations that allow controlled substances to be electronically prescribed in a way that is both workable and scalable.
- **Action #2:** Work to ensure that “meaningful use” under the American Recovery and Reinvestment Act of 2009 requires the actual use of e-prescribing.
- **Action #3:** Fill gaps in e-prescribing participation among payers, state Medicaid programs and independent pharmacies.
- **Action #4:** Raise awareness across the industry about e-prescribing and encourage deployment and use of this technology – encompassing prescription benefit, prescription history and prescription routing.
- **Action #5:** Provide education, financial incentives and implementation assistance for all prescribers to adopt and use e-prescribing, with a particular focus on the needs of small and medium-size practices.

## Conclusion

In 2008, significant progress was made to advance e-prescribing. This was the result of a great deal of work by many individuals and organizations, including national and state policy makers, payers, physicians and other prescribers, pharmacies, software vendors, medical societies, patient safety and healthcare quality organizations, standards-setting organizations, and many others. Action is required, however, to ensure continued progress toward mainstream adoption and use of e-prescribing as a more informed, paperless prescribing process that reduces healthcare costs and improves safety and efficiency for all.



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## Introduction and Definition

Electronic prescribing, or “e-prescribing,” has evolved into a highly efficient and secure means of reducing health care costs and improving the safety, quality and efficiency of a process relied upon by millions of patients in the U.S. every day.

The annual *National Progress Report on E-Prescribing* was created to better inform and support efforts aimed at helping to drive the overall adoption and use of this critical technology.

The Report provides a summary of key statistics detailing the status of e-prescribing adoption and use in the U.S.

It does this by tracking actual electronic prescribing activity through the Surescripts network between 2006 and 2008. The Report includes a detailed analysis of the individual variables that most influenced e-prescribing in 2008 and concludes with recommendations on how to continue to accelerate the growth of e-prescribing.

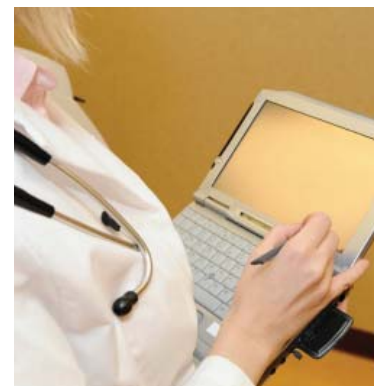
### E-Prescribing Defined

E-prescribing supports a shift to a paperless and more informed way for prescribers, payers and pharmacists to communicate.

E-prescribing occurs when a prescriber uses a computer or handheld device with software that enables him or her to:

- Electronically access that patient’s prescription benefit.
- With a patient’s consent, electronically access that patient’s prescription history.
- Electronically route the prescription to the patient’s choice of pharmacy. When the patient runs out of prescription refills, his or her pharmacist can also electronically send a prescription renewal request to the physician’s office for approval.

To view a demonstration of how e-prescribing works, please visit [www.surescripts.com/e-prescribing-101.html](http://www.surescripts.com/e-prescribing-101.html).



## Part 1: Electronic Prescribing Use

### Total E-Prescribing Message Volume

#### Description

Total e-prescribing message volume includes all messages related to the following prescribing services:

- Prescription benefit – both requests and responses.
- Prescription history – both requests and responses.
- Prescription routing – which includes new prescriptions, prescription renewal requests and responses.

In order for physician practices, payers, pharmacies and patients to gain the full benefit of e-prescribing, all services must be fully available and used.

E-prescribing message volume doubled between 2007 and 2008 to over 240 million.

Total E-Prescribing Message Volume

Figure 1



#### Key Statistics

- E-prescribing message volume doubled between 2007 and 2008 to over 240 million. (Figure 1)
- The number of e-prescribing messages between 2006 and 2008 totaled nearly half a billion.

## Prescription Benefit

### Description

Surescripts works with the nation's payers and PBMs to offer prescribers access to their patients' prescription benefit — formulary and eligibility information — in real time during an office visit. Prescribers access prescription benefit information using software provided by a vendor that is certified by Surescripts for this service.<sup>1</sup>

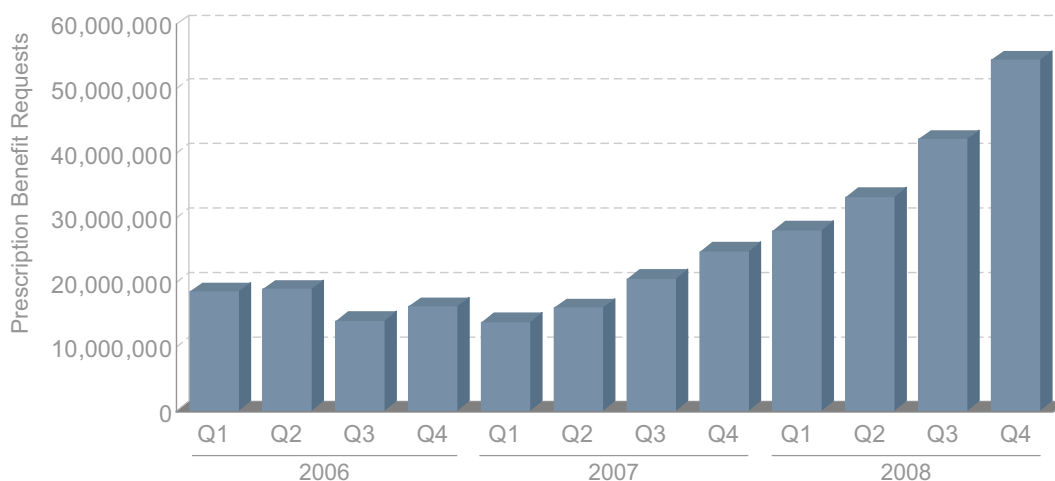
Because this information is available up front, prescribers can choose medications that are on formulary and are covered by the patient's drug benefit. Prescribers can also choose lower-cost alternatives such as generic drugs.

Dispensing pharmacies are more likely to receive prescriptions that do not require changes based on the patient's drug benefit, which, in turn, reduces unnecessary phone calls from pharmacy staff to physician practices regarding drug coverage.

Electronic requests for prescription benefit information grew from 37 million in 2007 to 78 million in 2008.

Prescription Benefit: Quarterly Growth

Figure 2



### Key Statistics

- **Electronic requests for prescription benefit information grew from 37 million in 2007 to 78 million in 2008. (Figure 2)**
- Although this growth is significant, it only represents an increase from 4 percent of patient visits to 9 percent.<sup>2</sup>
- There were more electronic requests for prescription benefit information in 2008 than in 2006 and 2007 combined.
- More than 149 million electronic requests for prescription benefit have been processed since 2006.
- At the end of 2008, the response rate to requests for prescription benefit (the rate at which information for the patient can be returned to the prescriber) was 69 percent.

[1] For more information about Surescripts certification, visit [www.surescripts.com/certification.html](http://www.surescripts.com/certification.html).

[2] According to the August 2008 *National Ambulatory Medical Care Survey*, an estimated 902 million visits were made to office-based physicians in 2006, an average of about 306.6 visits for every 100 persons.

## Prescription History

### Description

With a patient's consent, prescription history allows a prescriber to review a more complete record of a patient's prescriptions by electronically requesting and receiving history information from payers and community pharmacies.<sup>3</sup> Surescripts works with payers and community pharmacies to make prescription history information available to prescribers in all 50 states and the District of Columbia. Prescribers access prescription history information through software provided by a vendor that is certified by Surescripts for this service.

Prescribers who can access critically important information on their patients' current and past prescriptions are better informed about potential medication issues with their patients (e.g., catching potentially harmful drug-to-drug interactions) and can use this information to improve safety, quality and even medication adherence.

The number of prescription histories delivered to prescribers grew from over 6 million in 2007 to over 16 million in 2008.

### Prescription History: Quarterly Growth

Figure 3



### Key Statistics

- **The number of prescription histories delivered to prescribers grew from over 6 million in 2007 to over 16 million in 2008. (Figure 3)**
- Although this growth is significant, it only represents an increase from 0.7 percent of patient visits to 1.8 percent.<sup>4</sup>
- With a patient's consent, Surescripts can provide access to prescription history data for more than 200 million patients.
- There were more prescription histories delivered in 2008 than in 2006 and 2007 combined.
- Close to 27 million prescription histories have been delivered to prescribers since 2006.

[3] For information on how Surescripts handles personal health information, please review our Privacy Policy on our Web site at: [www.surescripts.com/privacy-policy.html](http://www.surescripts.com/privacy-policy.html).

[4] According to the August 2008 *National Ambulatory Medical Care Survey*, an estimated 902 million visits were made to office-based physicians in 2006, an average of about 306.6 visits for every 100 persons.

## Prescription Routing

### Description

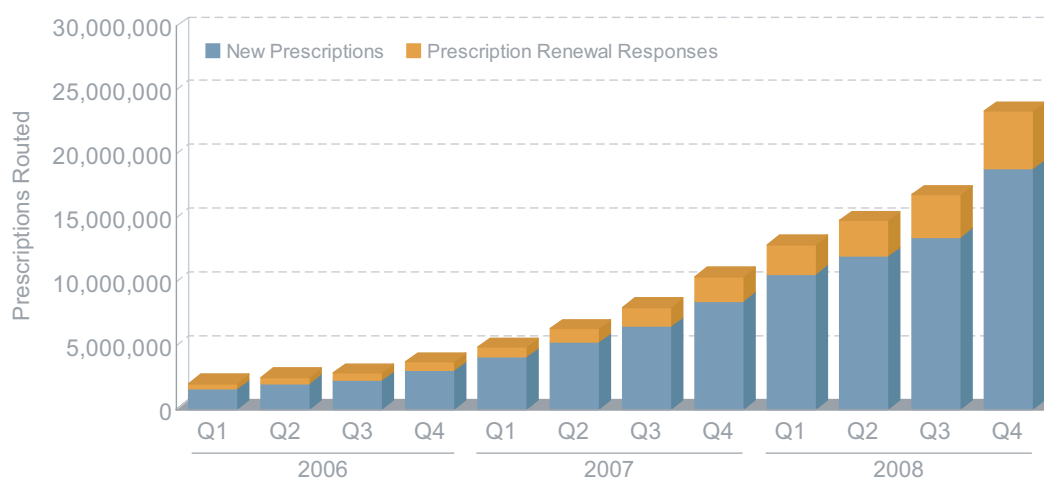
Prescription routing allows new prescriptions to be sent electronically to the computer system at the pharmacy of the patient's choice, as opposed to sending it by fax or on paper. Renewal authorization requests can be sent electronically from the computer system in the pharmacy to the practice's e-prescribing software. Prescribers can review and respond electronically to pending requests with a few keystrokes. Prescribers route prescriptions with pharmacies electronically using software provided by a vendor that is certified by Surescripts for this service.

Exchanging prescription information electronically between prescribers and pharmacies improves the accuracy of the prescribing process and saves time in the physician's office and in the pharmacy. Time savings primarily result from reduced pharmacy phone calls and faxes related to prescription renewal authorizations as well as a reduced need for pharmacy staff to key in prescription data.

Prescriptions routed electronically grew from 29 million in 2007 to 68 million in 2008.

Prescription Routing: Quarterly Growth

Figure 4



### Key Statistics

- **Prescriptions routed electronically grew from 29 million in 2007 to 68 million in 2008.<sup>5</sup> (Figure 4)**
- Although this growth is significant, it only represents a shift from 2 percent of eligible prescriptions to 4 percent.<sup>6</sup>
- In December 2008, the rate of prescriptions routed electronically, as a percentage of prescriptions eligible for electronic routing, rose to 6.6 percent.
- More electronic prescriptions were routed in 2008 than in 2006 and 2007 combined.
- More than 108 million electronic prescriptions have been routed since 2006.
- 13 million electronic prescription renewal responses were sent in 2008, versus more than 5 million prescription renewal responses routed in 2007.

[5] Although requests for prescription renewals were called out as a separate figure in the 2007 *National Progress Report on E-Prescribing*, they are not represented here, as prescription renewal requests do not lead directly to the issuing of prescription orders.

[6] This calculation is based on the 68 million new prescriptions and renewal responses electronically transmitted in 2008 and the 1.57 billion new prescriptions and renewals eligible for electronic routing in 2008 in the U.S., according to Wolters Kluwer Health Source® Pharmaceutical Audit Suite. (Note: Those 1.57 billion prescriptions do not include controlled substances as they are not eligible for e-prescribing under current DEA regulations. That figure also excludes preauthorized refills on existing prescriptions because they do not require communication between a physician and a pharmacist.)

## EMR vs. Standalone E-Prescribing Software

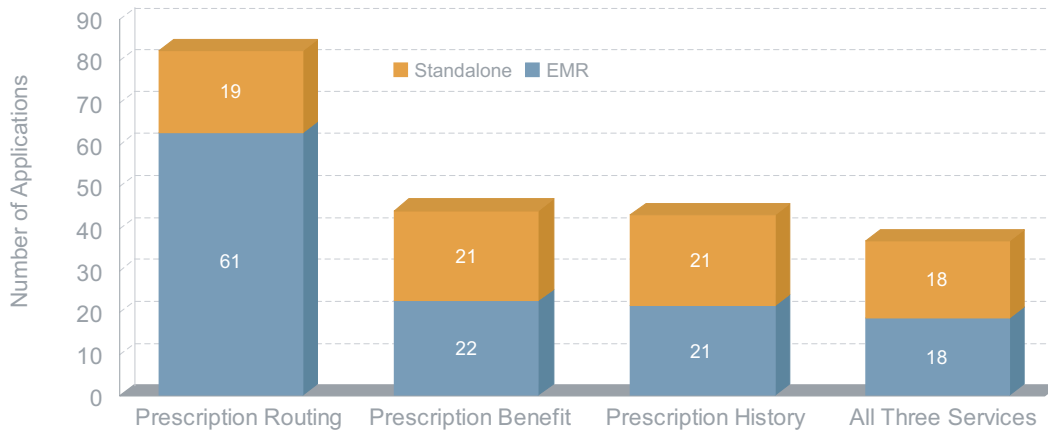
### Description

Prescribers e-prescribe using either electronic medical record (EMR) software or standalone e-prescribing software — software that performs only the e-prescribing function. By comparison, e-prescribing is integrated as a component within EMR software as one of many functions such as documentation and charge capture.

Only about 30 percent of EMR software was deployed for all three e-prescribing services, versus about 80 percent of standalone e-prescribing software.

Vendor Software Certified and Deployed for E-Prescribing

Figure 5



### Key Statistics

- Only about 30 percent of EMR software was deployed for all three e-prescribing services by the end of 2008, versus about 80 percent of standalone e-prescribing software. (Figure 5)
- 61 EMRs were certified and deployed for prescription routing in 2008 compared with 22 that were certified and deployed for prescription benefit and 21 for prescription history.
- The proportion of prescribers using EMR software versus standalone e-prescribing software for prescription routing grew from about 31 percent in 2006 to 63 percent in 2008.

## Part 2: Electronic Prescribing Adoption

### Prescribers

#### Description

Prescribers using electronic prescribing in the United States include physicians, nurse practitioners and physician assistants.

Prescribers Routing Prescriptions: Quarterly Growth

Figure 6



The number of prescribers routing prescriptions electronically grew from 36,000 at the end of 2007 to more than 74,000 by the end of 2008, or 12 percent of all office-based prescribers.

#### Key Statistics

- The number of prescribers routing prescriptions electronically grew from **36,000** at the end of 2007 to more than **74,000** by the end of 2008, or **12 percent** of all office-based prescribers. (Figure 6)
- This includes:<sup>7</sup>
  - ▶ approximately 62,000 physicians (or 12.1 percent of all office-based physicians)
  - ▶ approximately 8,000 nurse practitioners (or 13.6 percent of all office-based nurse practitioners)
  - ▶ approximately 4,000 physician assistants (or 9.7 percent of all office-based physician assistants)
- A portion of these prescribers also electronically accessed prescription benefit and prescription history services.
- More prescribers routed prescriptions electronically in 2008 than in 2006 and 2007 combined.

[7] Total number of prescribers represents approximately 511,000 office based physicians, 58,000 office-based nurse practitioners and 41,000 office-based physician assistants. These figures are Surescripts estimates based on data supplied by the American Medical Association, American Academy of Nurse Practitioners, and the American Academy of Physician Assistants.

AMA figures are from Physician Characteristics and Distribution in the US . 2009 ed. ( Chicago, IL : American Medical Association). Surescripts estimate of office-based physicians does not include the following specialties: anesthesiology, diagnostic radiology, emergency medicine, pathology, and radiology.

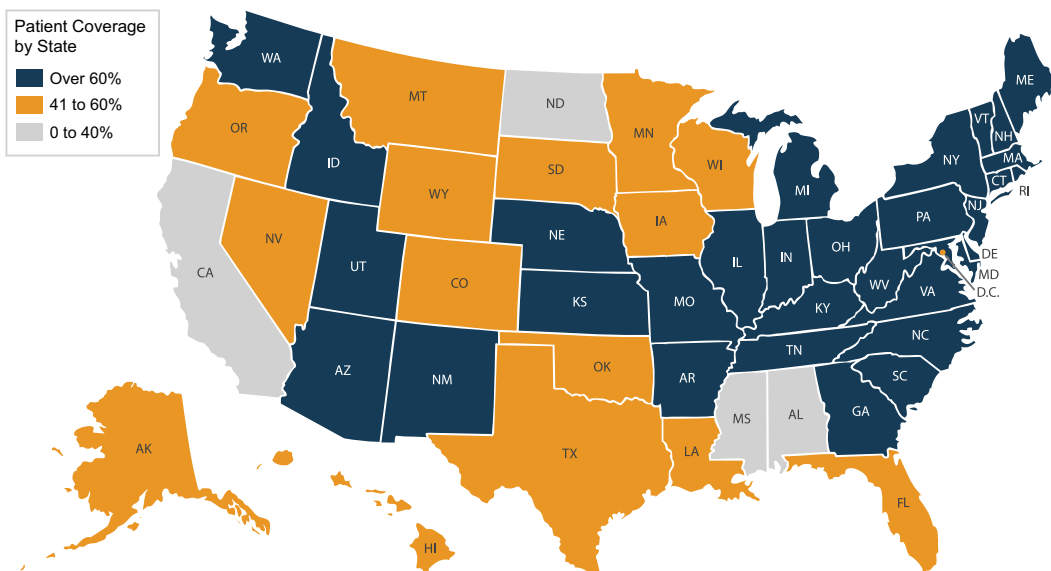
## Payers

### Description

The nation's public and private payers and their associated pharmacy benefit managers (PBMs) provide prescription benefit and prescription history information to help inform prescribers when they select medication therapy. Surescripts gives prescribers access to this information through its electronic connections to PBMs, which represent connections to thousands of health plans. For a list of payers and PBMs that are connected to Surescripts, please visit [www.surescripts.com/connected-payers.html](http://www.surescripts.com/connected-payers.html).

At the end of 2008, Surescripts could provide access to prescription benefit and history information for 65 percent of patients in the U.S.

Percent of Patients for Whom Payers can Provide Prescription Benefit Information **Figure 7**



### Key Statistics

- **At the end of 2008, Surescripts could provide access to prescription benefit and history information for 65 percent of patients in the U.S.<sup>8</sup> (Figure 7)**
- By the end of 2008, increased participation by payers in e-prescribing allowed prescribers to locate and access more than 230 million member records from participating health plans. This is an increase of 30 million records from 2007 and a direct result of 14 new payers connecting to the Surescripts network during the year.<sup>9</sup>
- In 2008, Surescripts provided access to more than 3,600 formulary files, including formulary status, coverage, co-pay and alternative medication lists maintained by participating health plans.

[8] Calculated by taking the number of records less 15 percent for patients who have more than one source of prescription benefit coverage, and dividing it by the U.S. population figure. Figures include the District of Columbia, Puerto Rico and U.S. territories. U.S. population figures are from "Annual Estimates of the Resident Population for the United States and Puerto Rico," Population Division, U.S. Census Bureau Release, December 22, 2008.

Surescripts estimates that payers can provide a prescription history for an estimated 95 percent of the patients for whom it can provide prescription benefit information. This is because some pharmacy benefits, when offered as a carve out, are not associated with a claims-based prescription history.

[9] This figure is inclusive of records from all 50 U.S. states, the District of Columbia, Puerto Rico and U.S. territories.

## State Medicaid Programs

### Description

E-prescribing is extending its reach beyond private health insurance by increasingly involving state Medicaid programs. Surescripts works with states that have their own PBM functions and those that contract out. Those that contract out can get connected for e-prescribing by contacting their vendors.

Having prescription benefit and prescription history information available to e-prescribers for their Medicaid patients increases the value of e-prescribing because information is available on more patients. In addition, state Medicaid programs and their Medicaid beneficiaries benefit from the patient safety gains and cost savings of e-prescribing. For example, according to a 2007 study, the successful implementation of electronic prescribing saved the state of Mississippi's Medicaid program \$1.2 million per month.<sup>10</sup>

Prescribers have the ability to conduct real-time eligibility and benefit checks through the Surescripts network, which helps states avoid the expensive “pay and chase” recovery of costs for drugs that were inappropriately billed to Medicaid instead of to private insurers. This could result in significant savings to the federal government and states, as Medicaid agencies spend about \$24 billion annually on outpatient prescription drugs.<sup>11</sup>

At the end of 2008, seven states were connected to the Surescripts network through their PBMs to deliver prescription information for fee-for-service Medicaid patients, with three more in process.

### Key Statistics

- **At the end of 2008, seven states were connected to the Surescripts network through their PBMs to deliver prescription information for fee-for-service Medicaid patients, with three more in process.**
- The states currently connected for e-prescribing are Arkansas, California (Medi-Cal), Delaware, Michigan, New Hampshire, New Mexico and Nevada. In fact, Arkansas's Medicaid program is taking the leadership role in promoting e-prescribing in the state.
- Connecticut, Pennsylvania and South Carolina are in the process of connecting.

[10] PCMA. (2007, September 14). *E-Prescribing Saving Mississippi Medicaid \$1.2 Million per Month*. <http://www.ahrq.gov/news/press/pr2006/meddrugpr.htm>

[11] AHRQ Press Release, April 26, 2006: *New AHRQ Study Shows Medicaid Spending on Outpatient Drugs More Than Doubled in Recent Years*, <http://www.ahrq.gov/news/press/pr2006/meddrugpr.htm>

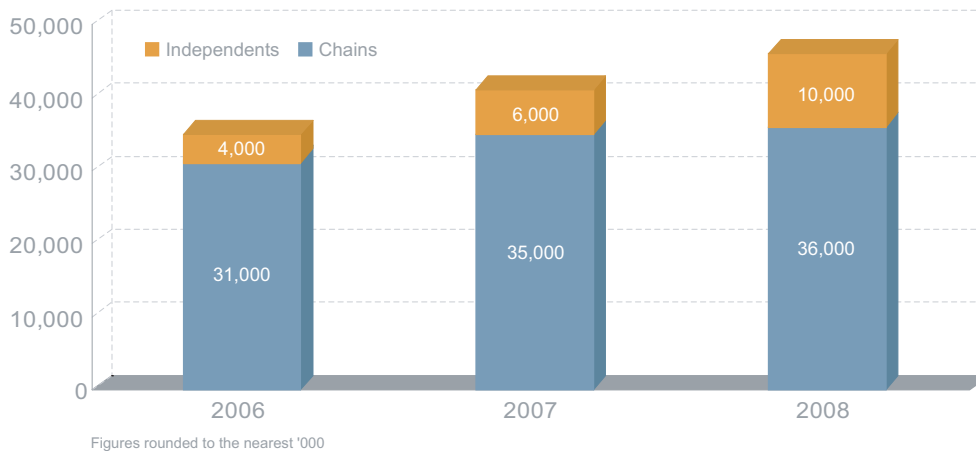
## Pharmacies — Community and Mail Order

### Description

There are approximately 61,000 community pharmacies in the United States, representing both chain and independently-owned pharmacies.<sup>12</sup> In addition, PBMs and some chain pharmacies operate mail order pharmacies. Surescripts works with these pharmacies to provide prescription routing connections to prescribers — the ability to send new prescriptions electronically to the computer system at the pharmacy of the patient's choice and the ability for pharmacies to send prescription renewal requests to the practices' e-prescribing software for their review and electronic response.

### Community Pharmacies Connected for Prescription Routing

Figure 8



At the end of 2008 approximately 76 percent of community pharmacies in the U.S. were connected for prescription routing and six of the largest mail order pharmacies were able to receive prescriptions electronically.

### Key Statistics

- **At the end of 2008 approximately 76 percent of community pharmacies in the U.S. were connected for prescription routing (Figure 8), and six of the largest mail order pharmacies were able to receive prescriptions electronically.**<sup>13, 14</sup>
- 46 percent of independently owned pharmacies were connected to the Surescripts network for prescription routing in 2008, up from 27 percent in 2007.
- More than 95 percent of chain pharmacies were connected to the Surescripts network for prescription routing in 2008.
- Of community pharmacies that are not connected, approximately 97 percent have pharmacy management software that has been certified for e-prescribing.
- In 2008, Surescripts routed more than 1.5 million new prescriptions and prescription renewal responses to mail order pharmacies.

[12] Based on NCPDP data analysis.

[13] Of the approximately 46,000 e-prescribing pharmacies, 78 percent are chain pharmacies and 22 percent are independently owned. For a list of e-prescribing pharmacies, go to [www.surescripts.com/connected-pharmacies.html](http://www.surescripts.com/connected-pharmacies.html).

[14] Mail order pharmacies are CVS Caremark, Express Scripts, Medco Health Services, Prescription Solutions, Prime Therapeutics and Walgreens Mail Service.

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## Part 3: Analysis — Key Drivers of E-Prescribing Adoption and Utilization in 2008

### Federal and State Policies

**CCHIT:** The Certification Commission for Healthcare Information Technology (CCHIT) announced that it will certify standalone e-prescribing applications in addition to EMRs.

**CMS:** Secretary of Health and Human Services Mike Leavitt's emphasis on e-prescribing led to the Centers for Medicare and Medicaid Services (CMS) sponsoring an e-prescribing conference in October that was very widely attended.

**CMS:** Medicaid began requiring tamperproof pads for prescriptions written for Medicaid patients with an exemption if the prescriber is e-prescribing. Medicaid also became increasingly active in health information technology and e-prescribing as a result of Medicaid transformation grants.

**CMS:** CMS announced that as of January 1, 2012, all computer-generated prescriptions for Medicare Part D patients must comply with the NCPDP SCRIPT standard and thus be transmitted electronically and not by computer-generated fax. This action encourages prescribers using e-prescribing software that routes prescriptions by computer-generated fax to take the steps to update their systems to comply with the requirement.

**DEA:** In June, the Drug Enforcement Administration (DEA) published a proposed rule to allow controlled substances to be e-prescribed. Public comments on this rule were due by late September. This was encouraging to many who have long cited the DEA restriction as a significant barrier.

**MIPPA:** Congress enacted the Medicare Improvements for Patients and Providers Act (MIPPA) in July. Under MIPPA, prescribers are eligible for incentive payments if, among other requirements, they use a "qualified" system for e-prescribing. Qualified systems include the ability to generate a medication list (with information from payers or pharmacies if available); select medications, transmit prescriptions electronically using the applicable standards and warn the prescriber of possible undesirable or unsafe situations; provide information on lower-cost, therapeutically appropriate alternatives; and provide information on formulary or tiered formulary medications, patient eligibility and authorization requirements received electronically from the patient's drug plan. More information can be found at [www.cms.hhs.gov/ERXincentive/](http://www.cms.hhs.gov/ERXincentive/).

### National Programs

**Center for Health Transformation:** The Center for Health Transformation provided leadership on a wide range of health information technology issues, including e-prescribing, with an e-prescribing paper published in June and related op-eds from former Speaker of the House and founder of the Center for Health Transformation Newt Gingrich and U.S. Senator John Kerry.

**The Center for Improving Medication Management/eHealth Initiative:** The Center for Improving Medication Management and the eHealth Initiative published *E-Prescribing: Becoming Mainstream Practice* as well as practical guides for payers and consumers, which can be downloaded through [www.TheCIMM.org](http://www.TheCIMM.org).

**The Center for Improving Medication Management/eHealth Initiative/Medical Societies:** The eHealth Initiative, the Center for Improving Medication Management, the American Medical Association, the Medical Group Management Association, the American Academy

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of Family Physicians and the American College of Physicians published *The Clinician Guide to E-Prescribing* in conjunction with the CMS Conference on E-Prescribing, which can be downloaded through [www.TheCIMM.org](http://www.TheCIMM.org).

**Community Pharmacies:** Over 29,000 community pharmacies launched an e-prescribing consumer education campaign and a program Web site, [www.LearnAboutEprescriptions.com](http://www.LearnAboutEprescriptions.com). Pharmacies nationwide participated in the program by displaying signage and offering educational materials with the themes “Give your prescription a head start,” “e-prescriptions filled here” and “Ask your doctor for an e-prescription.”

**Medical Societies:** Medical societies became more active than ever before in educating their members and providing resources to help them move forward with e-prescribing and EMRs. For example, the nation’s medical societies collaborated with the Center for Improving Medication Management to launch the national “Get Connected” program and promote the program to their members through various communication vehicles.

The program provides a Web-based resource – [www.GetRxConnected.org](http://www.GetRxConnected.org) – to help prescribers assess their e-prescribing readiness and acquire electronic prescribing technology. In 2008, there were approximately 5,700 completed technology assessments, representing close to 43,000 prescribers. More than 1,400 prescribers associated with sites that generated reports through [GetRxConnected.org](http://GetRxConnected.org) subsequently became connected for e-prescribing.

**National Governors Association:** The National Governors Association State eHealth Alliance provided leadership on health information technology, including e-prescribing.

**PCMA/RxHub:** The Pharmaceutical Care Management Association (PCMA) and RxHub partnered to host an e-prescribing symposium for senior executives, decision makers and key influencers called “Blueprint for Implementation” in Washington, D.C. Featured speakers included Newt Gingrich, Senator John Kerry and Secretary of Health and Human Services Michael Leavitt. The event provided insight on how current e-prescribing technology is ready for broad utilization and how legislation impacts PBMs, managed care, payers, manufacturers, government and technology partners. *Blueprint for E-Prescribing: A Detailed Plan of Action for Implementing E-Prescribing* (download at [www.surescripts.com/research-prescriber-guides.html](http://www.surescripts.com/research-prescriber-guides.html)) was released during the conference.

**States:** Payers, health systems, departments of health, governors offices and multi-stakeholder collaborations implemented increasingly effective programs in more and more states to drive e-prescribing. The initiatives in the earliest markets evolved their programs to drive utilization with EMRs in addition to standalone e-prescribing, set goals, and monitored their progress. Examples of these markets include Arizona, Connecticut, Florida, Massachusetts, Michigan, New Hampshire, North Carolina and Rhode Island. Newer initiatives got under way with focused e-prescribing initiatives in Arkansas, California, Colorado, Georgia, Idaho, Illinois, Indiana, Maine, Minnesota, New Hampshire, New York, Pennsylvania, Tennessee and Texas.

**NACDS/NCPA/Surescripts:** At the third annual Safe-Rx™ Awards, hosted by Newt Gingrich on Capitol Hill and featuring Senator John Kerry, the 10 states with the highest rates of e-prescribing use were recognized. For the first time in 2008, all states were informed of their adoption status and ranking among all 50 states.

The 3rd Annual

Safe-Rx  
Awards 



## E-prescribing Adoption and Use Accelerated Among Key Groups

**Independent Pharmacies:** More than 4,000 independents became enabled for e-prescribing in 2008. Coordinated outreach between NCPA, Surescripts, and other regional and state pharmacy organizations helped drive awareness of e-prescribing to independents, including monthly updates on e-prescribing activity in the pharmacy's area. At the end of 2008, 46 percent of independents were connected, compared to 27 percent at the end of 2007. Of independent pharmacies that are not connected, approximately 97 percent have pharmacy management software that has been certified for e-prescribing and can be enabled by contacting their software vendor.

**Payers and State Medicaid plans:** Substantial progress was made in connecting payers, particularly those with Medicare Part D membership, and state Medicaid programs to deliver prescription benefit and prescription history information to prescribers to better inform the prescribing process. This helps to increase the number of people for whom Surescripts can deliver prescription benefit and prescription history information – adding more value for prescribers and their patients.

The major drivers behind the trend include community-based e-prescribing initiatives and new e-prescribing requirements under Medicare's prescription drug program (Part D). As a result, Prescription Solutions, CIGNA and other large and small Part D plans (through their PBMs) were connected for e-prescribing. This enables Surescripts to deliver to prescribers, through their e-prescribing and EMR systems, prescription-related information on the majority of Medicare beneficiaries.

Payers are also continuing to adopt e-prescribing because more information is available on the return on investment in terms of both cost savings and patient safety. With regard to cost savings, a recent study found that because of access to formulary information, e-prescribers in Massachusetts increased use of generics and other lower-cost options, resulting in estimated savings of \$845,000 per 100,000 patients per year.<sup>15</sup> With regard to patient safety, Michigan's Henry Ford Health System found that e-prescribing resulted in a 24 percent reduction in the incidence of patients with prescription claims for severely contraindicated medications (e.g., warfarin and erythromycin, insulin and propranolol, lithium and thiazides) and a 48 percent reduction in the incidence of pregnant women who had prescription claims for severely contraindicated medications during pregnancy (including coumadin, heparin and oral diabetic agents).<sup>16</sup>

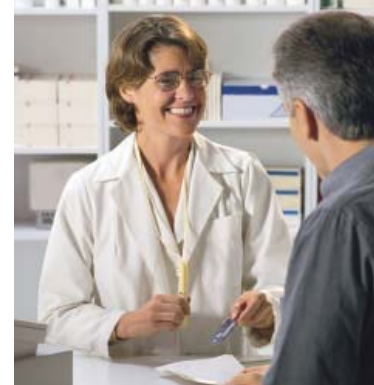


[15] Fisher, MA et al. (2008, December 8). *Effect of Electronic Prescribing with Formulary Decision Support on Medication Use and Cost*. *Arch Intern Med* 168(22):2449-2458.

[16] Allard, RD and Walsh, M. (2008). *E-Prescribing Success in Michigan*. Presentation to the 2008 Drug Trend Symposium.

**Prescribers:** Prescribers are moving ahead with e-prescribing to improve patient safety, improve practice efficiency, and position for pay-for-performance and other programs designed to incentivize prescribers to adopt and use e-prescribing technology. Prescribers are using any of more than 100 types of certified e-prescribing and EMR software and are being encouraged to adopt and use prescription benefit, prescription history and prescription routing services.

Adoption of EMR software and e-prescribing software is further along among large practices compared to small and medium-size practices (see Figure 9). Large practices tend to have more financial resources and information technology staff support than do their small and medium-size practice counterparts. Small and medium-size practices tend to have more limited financial resources and expertise to determine how best to move forward with health information technology.



**Rates of Adoption of Electronic Health Records by Physicians, with Adjustments for the Characteristics of the Physicians and Their Practices<sup>17</sup> Figure 9**

No. of physicians in practice	Fully functioning systems	Basic systems	No basic or fully functioning system
1–3	2%	7%	91%
4–5	3%	11%	86%
6–10	6%	17%	77%
11–50	8%	22%	71%
>50	17%	33%	50%

[17] Source: *Electronic Health Records in Ambulatory Care – A National Survey of Physicians*, New England Journal of Medicine July 8, 2008.

The survey defines “fully functioning” electronic health record systems as those that possess functions that fall into four domains: recording patients’ clinical and demographic data, viewing and managing results of laboratory tests and imaging, managing order entry (including electronic prescriptions), and supporting clinical decisions (including warnings about drug interactions or contradictions). The principal differences between a fully functional system and a basic system were the absence of certain order-entry capabilities – including electronic prescribing – and clinical-decision support in a basic system.

## Part 4: Next Steps — Action Needed

This report illustrates the progress in e-prescribing adoption and use and the momentum behind this progress. Nevertheless, there is much work still to be done for e-prescribing to reach levels of adoption and use that would be considered standard practice. Reaching this objective requires that leaders at the local, state and national levels continue to prioritize support for e-prescribing. Surescripts recommends that five actions be taken as soon as possible:

- **Action #1:** Continue to work with the DEA to pass regulations that allow controlled substances to be electronically prescribed in a manner that is both workable and scalable and balances the legitimate and important interests of law enforcement, private industry, the federal government and state governments to promote the adoption and use of health information technology. In 2008, 359 million prescriptions issued for controlled substances were not eligible for electronic prescription routing due to the Drug Enforcement Administration prohibiting the electronic transmission of controlled substances.<sup>18</sup>
- **Action #2:** Work to ensure that “meaningful use” under the American Recovery and Reinvestment Act of 2009 requires the actual use of e-prescribing which encompasses prescription benefit, prescription history and prescription routing.
- **Action #3:** Fill gaps in e-prescribing participation among payers, State Medicaid programs and independent pharmacies.
- **Action #4:** Raise awareness across the industry and encourage deployment and use of e-prescribing, including prescription benefit, prescription history and prescription routing. This is required for prescribers to be eligible for bonuses under the Medicare Improvements for Patients and Providers Act (MIPPA) and is the only way that all stakeholders will realize the full clinical and economic benefits of electronic prescribing. Ensuring that prescribers understand the availability and value of prescription benefit and prescription history, and can access and use them in addition to prescription routing services, will improve the safety and cost-effectiveness of prescribing decisions and better inform prescription management.
- **Action #5:** Provide additional education, financial incentives and implementation assistance for all prescribers. This is especially important for prescribers working in small and medium-size practices because: a) they handle approximately 90 percent of all patient visits; and b) their practices have the most limited financial resources and staff to select, purchase and implement e-prescribing and EMRs.<sup>19</sup>

Implementing e-prescribing and EMRs can be challenging. As such, there remains a critical need for the industry to come together and provide support in the form of: education for prescribers on how to get started; more financial incentives such as MIPPA, pay-for-performance programs and now the American Reinvestment and Recovery Act to ease the financial burdens for prescribers; and implementation assistance to ensure that prescribers have somewhere to turn for help if they encounter technical issues or challenges with how e-prescribing impacts how their practice goes about its daily tasks (i.e. workflow).



[18] Source: NACDS

[19] National Ambulatory Medical Care Survey: 2006 Summary.

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## Conclusion

In 2008, significant progress was made to advance e-prescribing. This was the result of a great deal of work by many individuals and organizations, including national and state policy makers, payers, physicians and other prescribers, pharmacies, software vendors, medical societies, patient safety and healthcare quality organizations, standards-setting organizations and many others. Action is required, however, to ensure continued progress toward mainstream adoption and use of e-prescribing as a more informed, paperless prescribing process that reduces healthcare costs and improves safety and efficiency for all.

With its recent advances, electronic prescribing technology holds great promise as a solution to a national problem that affects all patients and their families. By providing an unprecedented level of transparency and insight into the challenges and opportunities facing e-prescribing adoption and use, the *National Progress Report on E-Prescribing* aspires to better inform decision makers who are in a position to accelerate progress toward this solution. For those who would like to comment on the report, please email [progress.report@surescripts.com](mailto:progress.report@surescripts.com).



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