



# THE NATIONAL PROGRESS REPORT

ON E-PRESCRIBING AND INTEROPERABLE HEALTHCARE

YEAR 2010



**sure**scripts®

neutrality

transparency

physician and patient choice

open standards

collaboration

privacy

# THE EVOLUTION OF E-PRESCRIBING

- 190,000—or 36%—of office-based physicians e-prescribe.
- Surescripts announces network expansion to allow clinicians to exchange all types of clinical messages with their peers.
- The U.S. Drug Enforcement Administration allows the option of issuing prescriptions for controlled medications electronically.
- Patient Protection and Affordable Care Act passes.

- CMS issues Medicare Part D e-prescribing incentive regulations.
- DEA proposes rule to allow e-prescribing for controlled substances.
- Medicare Improvements for Patients and Providers Act (MIPPA) passes; includes e-prescribing incentives.
- RxHub and SureScripts merge to form SureScripts-RxHub.

- CMS pilot-tests proposed Medicare Part D e-prescribing standards.
- First annual Safe-Rx Awards recognize top e-prescribing states.
- Institute of Medicine releases pivotal "Preventing Medication Errors" report.

- Approximately 2,500—or 0.4%—of office-based prescribers use e-prescribing.
- Office of the National Coordinator for Health Information Technology (ONC) is established.
- SureScripts launches e-prescribing community adoption programs.

- RxHub begins network operations.

2011

2010

2009

2008

2007

2006

2005

2004

2003

2002

2001

- American Recovery and Reinvestment Act provides \$19 billion toward adoption of health information technology.
- CMS releases proposed regulations defining meaningful use of EMRs. E-prescribing is a key component.
- Medicare launches MIPPA e-prescribing incentive program.
- Rhode Island announces 100 percent of its pharmacies are enabled for e-prescribing.
- SureScripts-RxHub is relaunched as Surescripts.

- Center for Improving Medication Management launched.
- E-Prescribing becomes legal in all 50 states and D.C.
- National E-Prescribing Safety Initiative launched.
- SureScripts, RxHub, Informed Decisions and the AMA launch ICERx.org to assist victims of natural disasters.

- First proposed "foundation standards" released for Medicare Part D e-prescribing.
- HHS issues Stark exemptions and fraud and abuse safe harbors.
- SureScripts and RxHub help launch [www.katrinahealth.org](http://www.katrinahealth.org) to support victims of Hurricane Katrina.

- Institute of Medicine endorses National Health Information Infrastructure.
- Medicare Modernization Act provides incentives for e-prescribing adoption.
- SureScripts begins network operations.

- RxHub founded.
- SureScripts founded.

# INTRODUCTION



## A LETTER FROM THE PRESIDENT AND CEO

I am very pleased to introduce *The National Progress Report on E-Prescribing and Interoperable Healthcare for 2010*. The fourth edition of this annual report documents the status of electronic prescribing's adoption and use throughout the U.S. and features a broader analysis of the nation's drive towards more interoperable healthcare.

With over 34 percent of the nation's prescribers actively managing prescriptions electronically and 25 percent of prescriptions transmitted by this method at the end of 2010, e-prescribing is now well on its way to becoming mainstream practice. Replacing phone-, fax- and paper-based prescribing with secure electronic exchange is improving medication management, increasing patient convenience and reducing costs for all healthcare participants. What's more, the factors behind e-prescribing's success serve as a model for broader adoption and use of health IT.

**The unprecedented collaboration between the public and private sectors**—Whether working together on standards or on the appropriate mix of incentives for providers, the growth of e-prescribing has proven the critical importance and effectiveness of collaboration between federal and state governments and the entire healthcare industry.

**The many tangible benefits for all e-prescribing participants**—Benefits include fewer medical errors due to poor handwriting; greater awareness of potential adverse drug interactions; more effective communication of a patient's insurance coverage and generic alternatives; increased adherence; more accurate, efficient and lower-cost means for physicians, pharmacies and payers to communicate and process prescriptions; and a more convenient means for patients to obtain the prescription drugs they need.

**Surescripts' commitment to collaborating with all healthcare participants to realize a neutral nationwide e-prescribing network**—In addition to neutrality and collaboration, Surescripts' long-standing principles of transparency, open standards, protection of physician choice of therapy and patient choice of pharmacy, and privacy protection have created an ecosystem that enables the rapid growth of e-prescribing.

**The vision and support of the nation's community pharmacies and leading PBMs**—Ten years ago, leaders from these organizations saw the opportunity and took action together to dramatically improve one of the largest segments of the nation's healthcare system.

And now Surescripts is pleased to extend this model to allow providers to exchange clinical information with their peers. In doing so, we are responding to a clear need in the market for a nationwide network for clinical interoperability, one that supports HITECH Meaningful Use requirements and serves emerging models of collaborative care. We are committed to applying the same principles and lessons learned from e-prescribing to further inform and improve health care outcomes, patient safety, and the overall doctor-patient relationship.

I encourage you to explore our 2010 report to learn more about how e-prescribing and interoperable healthcare are growing and driving the digital transformation of the nation's healthcare system.

Regards,

A handwritten signature in blue ink, appearing to read 'HT', written over a light blue circular watermark.

Harry Totonis  
President and CEO, Surescripts



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# INTRODUCTION

The need for the secure and timely electronic exchange of clinical health information has been identified as fundamental for supporting ongoing improvements in the quality and efficiency of healthcare.

The combination of an aging population and higher demands for healthcare through recent reform efforts is accelerating the demand and adoption of health-related technology. Government incentive programs consider the use of such technology to be critical toward promoting a more efficient and more collaborative environment for patient care.

Measuring the adoption and use of health information technology will be essential to determine if such technology is living up to its promise. As the most established form of electronic clinical message exchange, electronic prescribing (e-prescribing) can serve as a valuable bellwether for assessing

the overall use of health-related technology. As evidenced through e-prescribing's high rates of growth, the electronic exchange of healthcare information is on a path to becoming mainstream.

As the organization that manages the nation's e-prescription network, Surescripts has been in an ideal position to observe and report on the growth of e-prescribing through its annual *National Progress Report on E-Prescribing*. This year's report tracks the adoption and use of e-prescribing between 2008 and 2010.

For 2010, the *Report* offers analysis of statistical trends and underlying factors that extend beyond e-prescribing. Future editions of the *Report* will feature qualitative and quantitative analysis on a broader set of factors driving the overall interoperability of the nation's healthcare system.

## EXECUTIVE SUMMARY

### E-Prescribing Adoption and Use

Significant growth was seen between 2008 and 2010 in the adoption and use of the three critical steps that enable the e-prescribing process: prescription benefit, medication history and prescription routing.

#### Part 1: Electronic Prescribing Use

- **Prescription Benefit:** Electronic responses to requests for prescription benefit information grew 125% from 188 million in 2009 to 423 million in 2010.
- **Medication History:** Prescription histories delivered to prescribers grew 184% from 81 million in 2009 to 230 million in 2010.
- **Prescription Routing:** Prescriptions routed electronically grew 72% from 191 million in 2009 to 326 million in 2010.
- **EHR vs. Standalone E-Prescribing Software:** About 79 percent of prescribers used EMRs in 2010, up from 70 percent in 2009.

#### Part 2: Electronic Prescribing Adoption

- **Prescribers:** The number of prescribers routing prescriptions electronically grew from 156,000 at the end of 2009 to 234,000 by the end of 2010—representing about 34 percent of all office-based prescribers.
- **Payers:** At the end of 2010, Surescripts could provide access to prescription benefit and history information for more than 66 percent of patients in the U.S.
- **Community and Mail Order Pharmacies:** At the end of 2010, approximately 91 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:

##### Industry Drivers

The federal government is playing a significant role in influencing the growth of interoperable health technologies.

##### Drivers of Interoperable Healthcare in 2010

- **HITECH:** Incentive programs offered through the Health Information Technology for Economic and Clinical Health Act.
- **MIPPA:** Incentive programs offered through the Medicare Improvements for Patients and Providers Act.

##### Future Drivers of Interoperable Healthcare Growth

- **PPACA:** Reform efforts under the Patient Protection and Affordable Care Act.
- **EPCS:** DEA regulatory changes that give prescribers the option of issuing prescriptions for controlled substances electronically.

##### Recommendations

To support the continued growth of interoperable healthcare—including e-prescribing—Surescripts recommends extending the collaboration between government and industry in order to:

- **Drive utilization:** Continue to develop programs that focus on driving the utilization of e-prescribing and interoperable health technologies.
- **Bridge adoption gaps:** Address gaps in e-prescribing and EHR adoption by solo practitioners, by independently owned pharmacies and by state Medicaid programs.
- **Promote clinical collaboration:** Support emerging collaborative models of care.

# INTRODUCTION

## PROFILES IN INTEROPERABLE HEALTHCARE:

### CREATING CONNECTIONS THAT LAST—A Q&A WITH SURESCRIPTS' BOARD OF DIRECTORS

Surescripts was founded by the nation's retail pharmacies and the largest pharmacy benefit managers to transform the delivery, safety and efficiency of healthcare. Though long-time competitors, the benefits to all healthcare consumers compelled pharmacies and PBMs to take action together—despite their differences. By creating a neutral network based on industry standards, the Surescripts network has grown to become the nation's largest health information network.

The following interview with the Surescripts board of directors highlights how this was accomplished and how the Surescripts network creates a unique opportunity for all parts of the nation's healthcare system to connect, collaborate and transform healthcare.

#### **Surescripts' Board of Directors**

John Driscoll (Co-Chairman)—Medco Health Solutions

Donald C. Huonker (Co-Chairman)—Walgreens

Steve B. Miller, M.D.—Express Scripts

Ralph Petri—Kerr Drug

Jeffery T. Smith—CVS Caremark

Doug Hoey, R.Ph.—National Community Pharmacists Association

**It's no secret that your organizations have been seen as competitors by the industry. What ultimately made you decide to work together when it came to e-prescribing and Surescripts?**

**John Driscoll:** Much of our decision to work together stemmed from a shared belief in the benefits and opportunities that exist with e-prescribing. E-prescribing is inclusive of every party interested in high-quality, accurate and affordable prescriptions.

**Don Huonker:** Surescripts enables all “boats to rise”—independent of business model and whether or not we may be competitors. In the end, working together lets us improve health outcomes for our patients and enables lower costs for the healthcare system.

**What role does e-prescribing play and what value does it bring to the nation's efforts to reform healthcare?**

**John Driscoll:** With e-prescribing, we have a working parable of success. It enhances the entire healthcare system by bringing to bear 21st-century technological standards for mobility and quick and secure access to information. Moreover, e-prescribing improves outcomes for all parties and reduces costs.

**Don Huonker:** E-prescribing enables improved health outcomes while helping to lower costs—the sweet spot of health reform. E-prescribing improves the safety and quality of the prescribing process while reducing costs by increasing efficiencies for all stakeholders in the value chain. The neutrality and transparency of Surescripts help enable this collaborative solution.

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“E-PRESCRIBING IS INCLUSIVE OF EVERY PARTY INTERESTED IN HIGH-QUALITY, ACCURATE AND AFFORDABLE PRESCRIPTIONS.”

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**Are you surprised by the significant growth in e-prescribing, or is it in line with what you thought was possible when Surescripts began?**

**Steve Miller:** The growth of e-prescribing has surprised me in several regards. In the first place, adoption and growth have been much slower than any of us anticipated 15 years ago. For what appears to be a compelling case (safer, more affordable and more convenient), the initial uptake was much slower than originally anticipated. However, the growth in the last two years has been astonishing. We have reached the proverbial tipping point.

**What do you think are the most significant benefits that e-prescribing has brought to the market?**

**Ralph Petri:** The most significant benefit e-prescribing has brought to the market is a high-quality electronic network that allows providers to communicate in a very secure and efficient manner. Surescripts has created a platform that will enable healthcare providers to use the network for many more healthcare transactions, which will ultimately lead to much improved health outcomes at a significant savings.

**Many point to Surescripts' neutrality and collaboration as two of its key attributes. What do neutrality and collaboration mean to your organizations, and why are they important to a network like Surescripts?**



**Steve Miller:** Surescripts has been successful because it is both collaborative and neutral. Prior to the merger of RxHub and Surescripts, you had two distinct entities competing in the same space. By collaborating and merging, the combined company became greater than the sum of the two parts. It was truly synergistic. Continued growth has occurred because the diverse ownership has required ongoing collaboration and neutrality.

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**“NEUTRALITY AND COLLABORATION ARE ESSENTIAL FOR SURESCRIPTS TO SUCCEED.”**

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**Ralph Petri:** Neutrality and collaboration are essential for Surescripts to succeed. Competing providers must have confidence that the network is being used to advance improved patient outcomes and not provide any specific advantage to individual providers or segments of the market.

**Some skepticism appears to exist around e-prescribing for some independents. How has e-prescribing benefited independents? What still needs to be done to get everyone connected?**

**Doug Hoey:** Years ago, when many pharmacies first signed up, there was not a critical mass of e-prescriptions coming in from physicians. However, now that we are seeing 20 percent of prescriptions coming through as e-prescriptions, the need is much clearer.

From a benefit standpoint, we are starting to see increased efficiency and safety. Increased efficiency allows pharmacists more time to spend with patients—i.e., more time to provide clinical services that they often don't have time for.

The physician incentives have clearly worked to attract more physicians to e-prescribing. This, in turn, has helped spur demand among independent pharmacies. The vast majority of independent pharmacies are now e-prescribing and I believe we are at the last mile.

**How important are the principles of neutrality and collaboration when it comes to facilitating the broader exchange of health information (e.g., labs, referrals, summaries)?**

**Jeff Smith:** Healthcare is undergoing a fundamental shift. Managing costs is not enough—all stakeholders must drive outcomes. This, in turn, is driving healthcare toward a more integrated, more collaborative model of care in which

providers need access to the right information at the right time. Without neutrality, nobody can support this new business model.

**Doug Hoey:** Those are the cornerstones of Surescripts and they are absolutely essential to facilitating broader health information exchange. It is important to keep in mind that the Surescripts network is voluntary. Organizations choose to collaborate on the network. If an organization ever felt it was being disadvantaged, it would no longer use the network. If organizations stop using the network, then there is no collaboration. Without collaboration, you lose the integration of healthcare that leads to lower costs and better patient outcomes.

**E-prescribing has grown more than sixfold in the last two years. What lessons can the nation apply to achieve similar rates of growth in clinical message exchange?**

**Jeff Smith:** The first lesson is that everyone must benefit from the system. With e-prescribing, physicians, pharmacies, payers and patients all benefit from improved safety and efficiency.

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**“BY ENABLING COLLABORATION BETWEEN HEALTHCARE PROVIDERS, WE ARE OPTIMIZING THE SYSTEM..”**

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The second lesson is that e-prescribing has proven that collaboration works. Take standards as an example. Pharmacies, PBMs and prescriber technology vendors demonstrated—through their work with NCPDP—how to develop standards in an inclusive way that would be acceptable to all. Driving ease of use is another example: e-prescribing really started to take off when it became easier for prescribers to implement. Improved ease of use was enabled by stakeholders collaborating on certification and otherwise working together to improve the prescriber experience.

Surescripts and MinuteClinic have already taken these lessons and successfully applied them to clinical message exchange. As one of the earliest implementations of the CCR standard, MinuteClinic nurse practitioners are able to exchange clinical messages with their patients' physicians. By enabling collaboration between healthcare providers, we are optimizing the system and creating better outcomes for patients.

## **REVIEW:** E-PRESCRIBING UTILIZATION AND ADOPTION GROWTH

Electronic prescribing, or ‘e-prescribing,’ supports a shift to a paperless and more informed way for prescribers, payers and pharmacists to make clinical decisions and improve work flows related to medication management.<sup>1</sup>

Significant growth was seen between 2008 and 2010 in the adoption and use of the three critical services that enable the e-prescribing process: prescription benefit, medication history and prescription routing.

## PART 1: ELECTRONIC PRESCRIBING USE

### PRESCRIPTION BENEFIT

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 a patient encounter.

Electronically accessing a patient's prescription benefit information allows prescribers to choose medications that are on formulary and are covered by a patient's drug benefit.

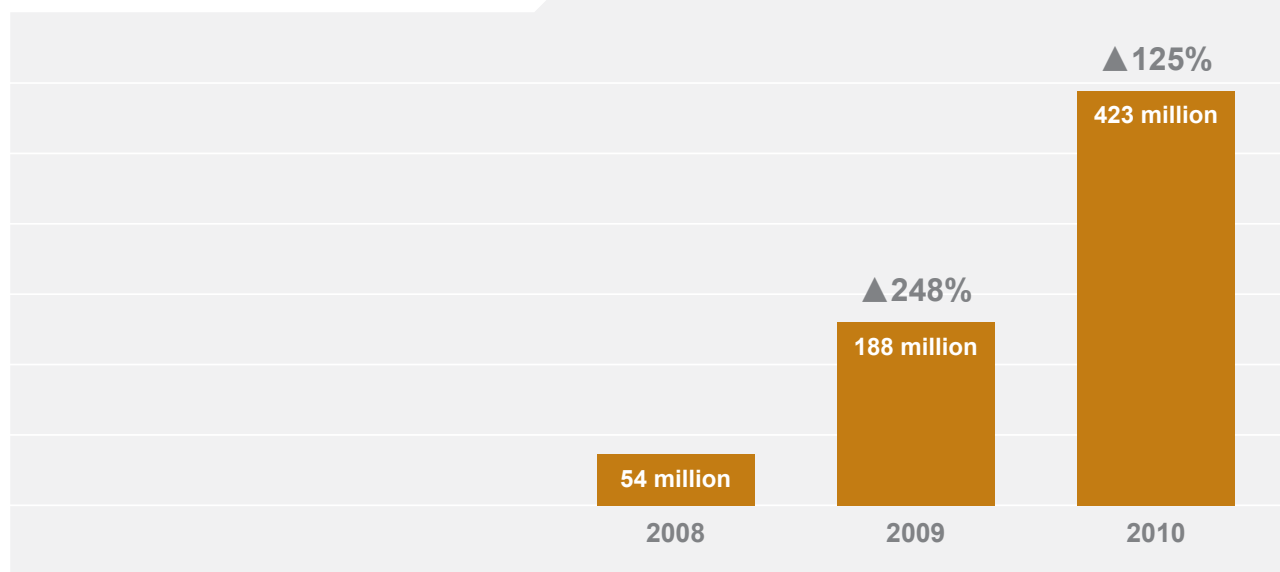
Prescribers access prescription benefit information using software provided by a vendor that is certified by Surescripts for this service.<sup>2</sup>

1 IN 3 PATIENT VISITS  
NOW INCLUDES THE  
OPPORTUNITY TO LOWER  
PRESCRIPTION COSTS

#### KEY STATISTICS

- Electronic responses to requests for prescription benefit information grew 125 percent in 2010.
- Approximately 36 percent of patient visits involved one of these responses in 2010, up from 19 percent in 2009.<sup>3</sup>
- On average, the response rate to prescription benefit requests (the rate at which information for the patient can be returned to the prescriber) was approximately 69% in 2010, up from 62% in 2009.

### Prescription Benefit Responses



Contributing Factors	2008	2009	2010
Active Prescribers (pg. 15)	74,000	156,000	234,000
Number of E-Prescribing Applications Certified for this Service (pg. 14)	43	78	137

Page 8 Footnote:

1 To view a demonstration of how e-prescribing works, please visit <http://www.surescripts.com/about-e-prescribing/how-e-prescribing-works.aspx>.

Page 9 Footnotes:

2 For more information about Surescripts certification, go to <http://surescripts.com/connect-to-surescripts/certification-overview.aspx>.

3 According to the August 2009 National Ambulatory Medical Care Summary, an estimated 956 million visits were made to office-based physicians in 2008 (data released 2010), an average of about 309 visits for every 100 persons—using 2010 U.S. population figure of approximately 309 million.

# PART 1: ELECTRONIC PRESCRIBING USE

## MEDICATION HISTORY AVAILABLE FOR MORE THAN TWICE AS MANY OFFICE VISITS IN 2010

### MEDICATION HISTORY

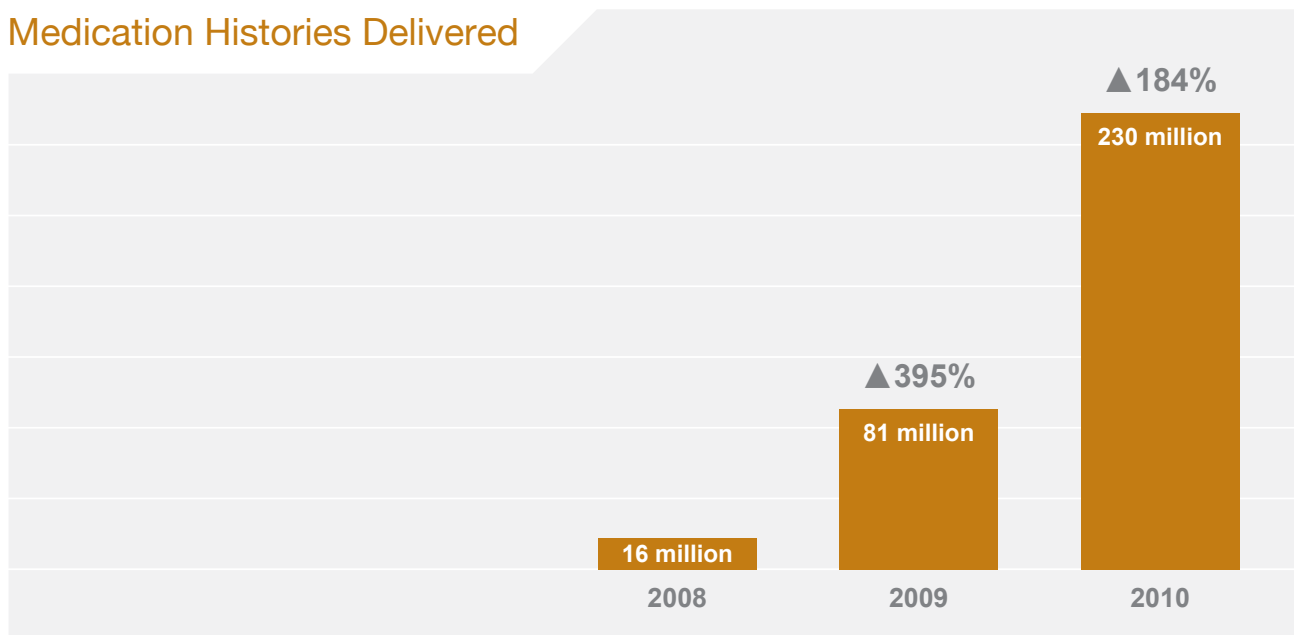
With a patient's consent,<sup>4</sup> medication history allows a prescriber to review a more complete record of patient medication by electronically requesting and receiving history information from payers and community pharmacies.

Surescripts works with payers and community pharmacies to make this information available to prescribers nationwide. Prescribers access medication history information through software provided by a vendor that is certified by Surescripts for this service.

#### KEY STATISTICS

- The number of medication histories delivered to prescribers electronically grew 184 percent.
- Approximately 24 percent of patient visits involved an electronically delivered medication history in 2010, up from 9 percent in 2009.
- In addition, medication history was electronically accessed by clinicians working in acute-care environments to support transitions in care.
- In 2010, over 14.6 million medication histories were delivered to clinicians in this environment.

### Medication Histories Delivered



Contributing Factors	2008	2009	2010
Active Prescribers (pg. 15)	74,000	156,000	234,000
Number of E-Prescribing Applications Certified for this Service (pg. 14)	42	76	133

## PROFILES IN INTEROPERABLE HEALTHCARE

### MEDICATION HISTORY IN THE ACUTE SETTING



**Dr. Tom McGill, Vice President, Quality and Safety**  
**Butler Health System, Butler, PA**

“You can’t practice good medicine if you don’t have an accurate, up-to-date medication list for the patient. This service has added significant value for us in terms of vastly expanding the physician’s knowledge base.”

#### Introduction

As aggregated records of patient medication history can now be delivered to acute-care settings, hospitals and other institutions are now finding new ways to streamline the medication reconciliation process.

#### Description

With more than 40,000 patients per year coming into their ER, Butler Health System was looking for solutions to help streamline the medication-reconciliation process. Medication reconciliation—in the absence of networked health technology—involves generating an active medication list for each incoming patient by using a combination of an interview process and phone- or fax-based follow-ups. Completeness and accuracy in the process are paramount, but the time needed to achieve it can be significant. While a Joint Commission standard, real-world performance of medication reconciliation can have significant flaws.

As a forward-looking institution, Butler piloted electronically sourced medication history as part of a larger program to build efficiencies, adopt patient-centered best practices and achieve higher standards of care through the implementation of health technology. This pilot provided an opportunity for Butler to assess the return on investment of this electronic service by comparing the use of technology against standard practice.

#### Study Design

In a randomized sample of 160 ER visits, Butler compared 71 visits that used electronically accessed patient medication history—accessed through the hospital’s

Health Monitoring Systems MediCenter application, with a connection to the Surescripts network—with 89 visits that used the standard medication reconciliation process.

Key measurement factors included the number of medications reported, the time needed to acquire a thorough medication history and the extent to which clinically significant medications were discovered.

#### Results

Through its analysis, Butler determined that use of electronically sourced medication history information achieved an average delivery of approximately 95 percent of current patient medications versus just 70 percent when relying on a patient interview alone. The pilot study also demonstrated that it would take an average of 19 additional minutes of staff time to achieve the 95 percent threshold using standard phone- and fax-based follow-ups.

In addition, when the study control group was reexamined using the acute-care medication history service, a number of clinically significant medications were discovered—including cardiac drugs and antibiotics—that had not been discovered using the interview-based process alone.

#### Next Steps

Having demonstrated the clinical utility and cost-effectiveness of electronically delivered patient medication history, Butler Health System now uses this service as part of its standard patient intake process within the ER. Future plans include expansion of the service hospital-wide.

# PART 1: ELECTRONIC PRESCRIBING USE

## 1 IN 4 PRESCRIPTIONS IS NOW AN E-PRESCRIPTION

### PRESCRIPTION ROUTING

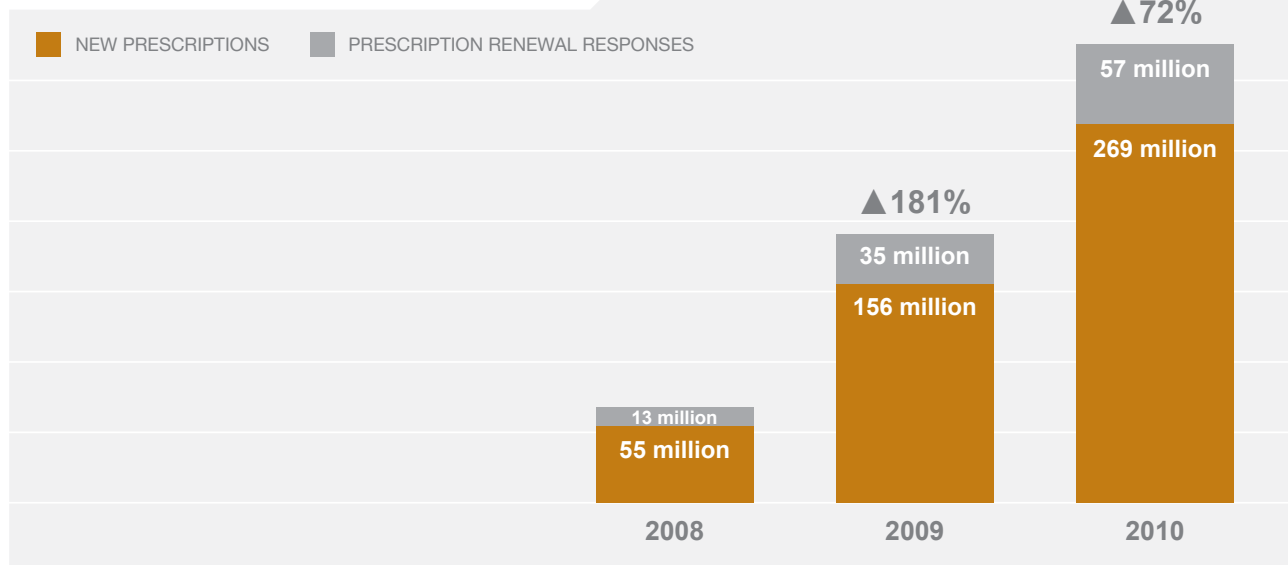
Prescription routing allows new prescriptions to be sent electronically to the computer system at the pharmacy of the patient's choice, as opposed to sending it by fax, calling it in or writing it on paper. Renewal authorization requests can be sent electronically from a pharmacy's computer to a practice's e-prescribing software, where they can be reviewed and responded to.

Prescribers exchange prescription information with pharmacies electronically and bi-directionally using software provided by a vendor that is certified by Surescripts for this service.

#### KEY STATISTICS

- At the end of 2010, approximately one in four prescriptions was delivered electronically, up from one in 18 prescriptions at the end of 2008.
- About 20 percent of eligible prescriptions were sent electronically in 2010 versus 12 percent in 2009.<sup>5</sup>
- By December 2010, approximately 25 percent of eligible prescriptions were being sent electronically.<sup>6</sup>
- Over 326 million prescriptions were routed electronically in 2010 versus 190 million in 2009—a 72 percent increase.<sup>7</sup>
- Of this, over 8 million electronic prescriptions were routed to mail order pharmacies.

### Prescription Routing Transactions



Contributing Factors	2008	2009	2010
Active Prescribers (pg. 15)	74,000	156,000	234,000
Number of E-Prescribing Applications Certified for this Service (pg. 14)	80	134	196
Connected Community Pharmacies (pg. 19)	76%	85%	91%

## PROFILES IN INTEROPERABLE HEALTHCARE

# QUALITY: THE KEY TO MORE CONFIDENT, FREQUENT AND MEANINGFUL USE



**David Yakimischak, Chief Quality Officer**  
Surescripts

“We believe that quality must be actively managed and not left to chance.”

Through its industry-wide quality program, Surescripts is committed to improving the end-to-end quality of e-prescribing—from the time a prescription is first considered by the prescriber to the time the medication is dispensed and at all points in between. Our efforts to measure, analyze and continually improve quality help us to minimize potential issues while helping to more fully realize the benefits of e-prescribing. We do this in two ways: first, through the management of our own operations, and second, through our end-to-end work with participants on the Surescripts network. This proactive approach requires a combination of skills from pharmacists, clinicians, technologists and Six Sigma Black Belt experts.

While the focus to date has been on e-prescribing, the Surescripts quality management program is being extended to improve other forms of health information exchange. Moving health information electronically is not enough—it must be accurately and reliably communicated. We believe that quality must be actively managed and not left to chance.

### Driving Quality Improvements in 2010

In 2010, we took significant steps toward achieving 100 percent reliability of the end-to-end e-prescribing process:

- By conducting clinical quality reviews on millions of electronic prescription messages, Surescripts has been able to measure and analyze the safety, accuracy and completeness of the electronic prescriptions that have flowed through the network.<sup>8</sup> This has enabled Surescripts to publish industry guidelines that define what an electronic prescription should or should not contain in order to convey to the pharmacist and the patient the clinician's therapeutic intent in an accurate, understandable, complete, unambiguous and efficient manner. These guidelines are available at <http://www.surescripts.com/eprescribingquality/page/guidelines.aspx>.
- Surescripts created quality measurement scorecards for vendors, practices and pharmacies. We shared these scorecards with our network participants and sought their commitment to enhancing their operations as part of the end-to-end focus on quality improvements.
- Surescripts completed the ISO quality standards 17025 and 65 required by the Office of the National Coordinator for Health Information Technology to become an ONC-authorized certification and testing body for e-prescribing in support of the HITECH meaningful use requirements. These independent quality standards confirm that Surescripts is following the highest standards for quality processes.

### Quality's Broader Role in Interoperable Healthcare

In 2011, Surescripts will conduct more in-depth measurement and analysis of e-prescribing quality while broadening its perspective to include all types of health information.

Within e-prescribing, Surescripts will go beyond conformance with guidelines to measure how often prescriptions require pharmacy intervention. An intervention is typically defined as a phone call made from the pharmacy back to the prescriber to clarify or confirm the prescriber's intent. Such measurement and analysis will afford the industry a deeper understanding of how much more efficient e-prescriptions are compared to paper prescriptions and what opportunities exist to continually improve that efficiency.

Surescripts will also look to develop new methods for measuring and analyzing the quality of prescription benefit and medication history messages, along with other types of clinical messages. As part of this effort, we will work with physicians, pharmacies, PBMs, payers and the technology vendors that serve all these network participants to gain a more detailed understanding of how quality improvements in work flow, safety and efficiency not only can reduce the risk of potential issues but also provide more value for these participants and the patients they serve. By looking to improve all aspects of quality, Surescripts aims to drive more confident, frequent and meaningful use of health information.

For more information and to get more involved, visit [www.surescripts.com/about-us/quality-program.aspx](http://www.surescripts.com/about-us/quality-program.aspx).

#### Page 12 Footnotes:

5 This calculation is based on the 326 million new prescriptions and renewal responses electronically transmitted in 2010 and the 1.66 billion new prescriptions and renewals eligible for electronic routing in 2010 in the U.S., according to NACDS. (Note: These 1.66 billion prescriptions do not include controlled substances, as Surescripts did not observe any instance of a controlled substance being delivered electronically to pharmacies in a manner compliant with DEA regulations. This figure also excludes preauthorized refills on existing prescriptions, as they do not require communication between a physician and a pharmacist.)

6 Note: The potential addition of prescriptions for controlled substances to the total number of prescriptions that are eligible for electronic routing in 2011 will affect the overall calculations for the percentage of prescriptions that are delivered electronically for the 2011 calendar year. It is estimated that 19 percent of total prescriptions written are for controlled substances, not counting preauthorized refills.

7 Requests for prescription renewals are not represented in this section, as prescription renewal requests do not lead directly to the issuing of prescription orders.

#### Page 13 Footnote:

8 When conducting clinical quality reviews of prescriptions, no personal health information is accessed.

# PART 1: ELECTRONIC PRESCRIBING USE

## EHR VS. STANDALONE E-PRESCRIBING SOFTWARE

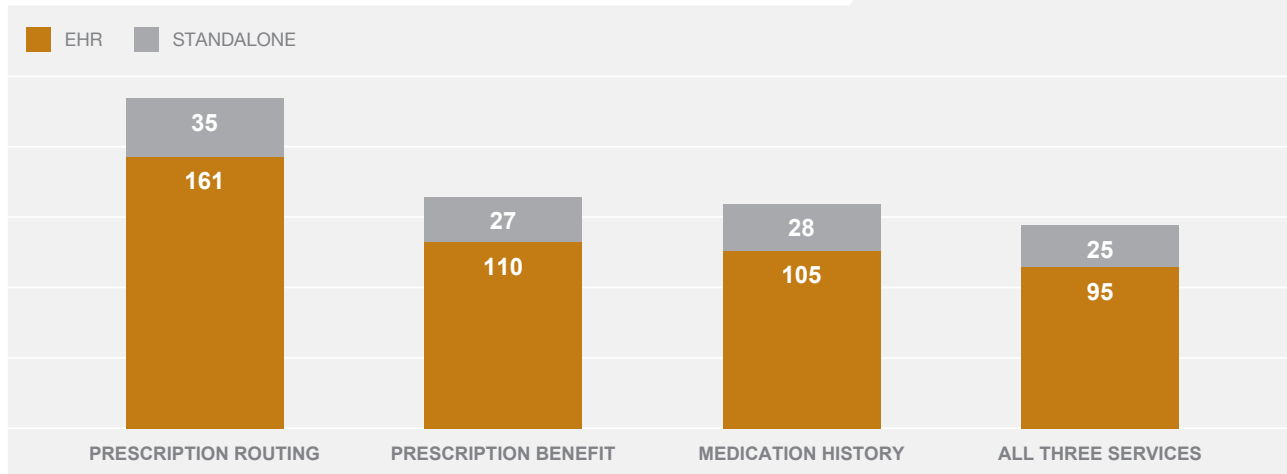
### EHRs OUTNUMBER STANDALONE E-PRESCRIBING APPLICATIONS BY 4 TO 1

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

#### KEY STATISTICS

- About 91 percent of prescribers who used EHRs in 2010 to e-prescribe used one that was deployed for all three e-prescribing services, versus 78 percent in 2009.
- 83 percent of deployed e-prescribing software applications are included within EHRs and 17 percent are standalone.
- 53 percent of certified and deployed EHR software was deployed for all three ambulatory e-prescribing services at the end of 2010—Benefit, Routing, History—compared with 68 percent of standalone software.<sup>9</sup>
- Some standalone e-prescribing software vendors license use of their products to companies that provide EHRs. At the end of 2010, 148 EHRs used imbedded standalone e-prescribing software that was certified for connectivity to the Surescripts network.

Vendor Software Certified and Deployed for E-Prescribing



Percentage of Active Prescribers Using EHR vs. Standalone E-Prescribing Software





## PART 2: ELECTRONIC PRESCRIBING ADOPTION

### PRESCRIBERS

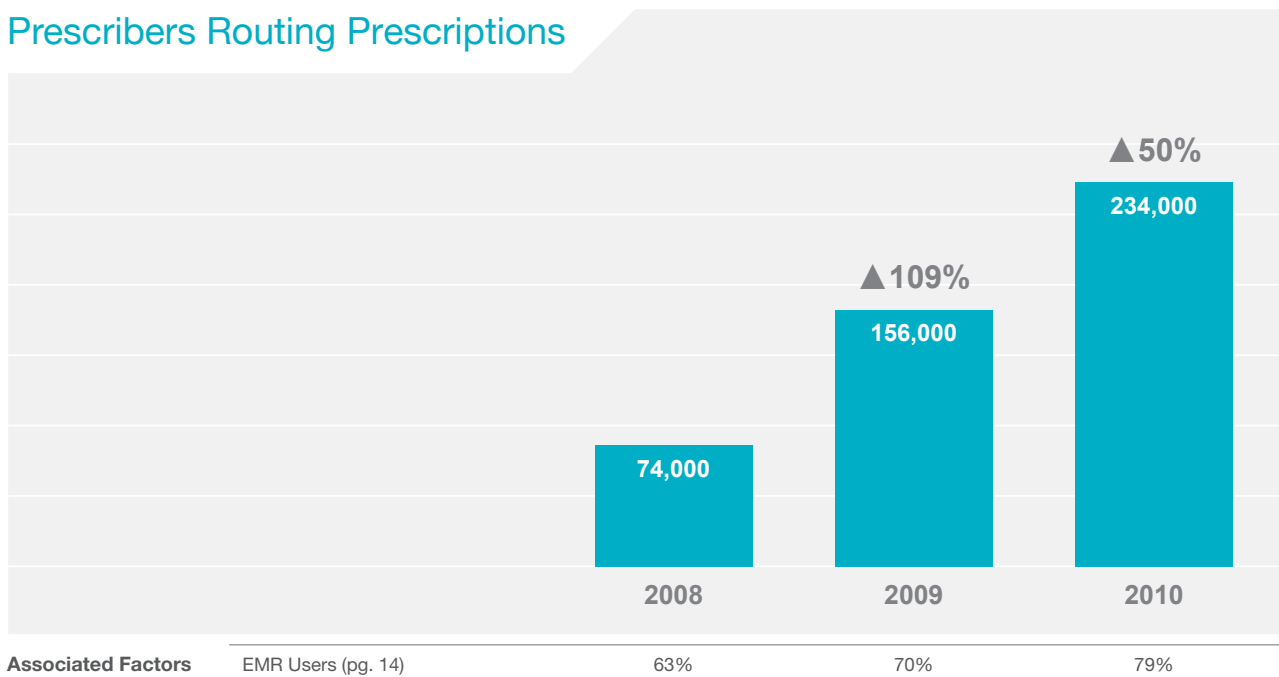
Prescribers using electronic prescribing in the United States include physicians, nurse practitioners and physician assistants. Prescribers use either stand-alone e-prescribing software or an electronic health record (EHR) to e-prescribe. All prescribers described in this section of the *Report* used Prescription Routing services. A portion of these prescribers also used Prescription Benefit and Medication History services.

36% OF OFFICE-BASED DOCTORS USE E-PRESCRIBING

#### KEY STATISTICS

- Approximately 234,000 prescribers routed prescriptions electronically by the end of 2010, up from 156,000 at the end of 2009. This represents about 34 percent of all office-based prescribers.<sup>10</sup>
- Of this 234,000, approximately 81 percent were doctors.
- Surescripts estimates that approximately 36 percent of office-based physicians are e-prescribing nationwide.

### Prescribers Routing Prescriptions



Page 14 Footnote:

9 Certification for all three e-prescribing services is comprehensive of certification for Prescription Benefit, Medication History and Prescription Routing services. Routing services include connectivity to retail and mail order pharmacy and the ability to manage prescription renewals electronically.

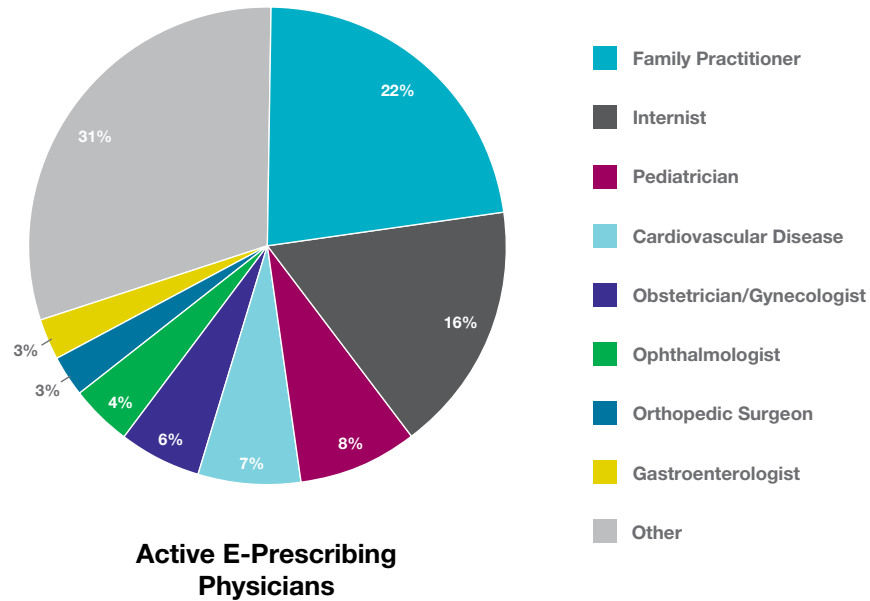
Page 15 Footnote:

10 Based on total count of 679,000 office-based prescribers, per SK&A data. Surescripts counts of active e-prescribers represent those that have used ambulatory prescription routing services within the last 30 days of 2010. A small proportion of these prescribers have been registered by hospitals and other organizations that do both ambulatory and acute care.

## PART 2: ELECTRONIC PRESCRIBING ADOPTION

### E-PRESCRIBING PHYSICIANS BY SPECIALTY

Surescripts estimates that physicians e-prescribing through the Surescripts network are representative of the following specialties.<sup>11</sup>



### CARDIOLOGISTS, FAMILY PRACTITIONERS LEAD E-PRESCRIBING ADOPTION

#### Percentage of Specialists Actively E-Prescribing

Specialty	% E-Prescribing
Cardiovascular Disease	49%
Family Physician	47%
Internist	45%
Ophthalmologist	40%
Gastroenterologist	38%
Pediatrician	36%
Obstetrician/Gynecologist	34%
Orthopedic Surgeon	24%
Other <sup>12</sup>	19%

## PROFILES IN INTEROPERABLE HEALTHCARE

# HEALTH INFORMATION TECHNOLOGY AND THE FAMILY PRACTITIONER



### A conversation with Dr. Steven Waldren, Director, Center for Health-IT American Academy of Family Physicians (AAFP)

“Accountable care models and medical homes will only work effectively if the communication between these parties can be conducted in a seamless, interoperable manner.”

The AAFP has long maintained a focus on influencing the adoption and use of health information technology. Here, Dr. Steven Waldren, director of AAFP’s Center for Health Information Technology, shares his perspective on how HIT is shaping the process of clinical care.

#### **Why has the AAFP placed such a focus on health information technology (HIT)?**

I believe our focus is a natural extension from the business of being a family practitioner. We find that family doctors are often entrepreneurial, innovative and engaged in the business of medicine. The nature of our membership has allowed us to develop our role as advocates for HIT to the extent that we have.

#### **What do you see as the biggest technology challenge facing the family practitioner right now?**

Family doctors are transitioning between established models of medicine and evolving models that are placing increasing focus on collaboration and quality. Health information technology plays an important role in supporting this shift.

We know that our members have been strong adopters of health technologies, with about 60 percent reporting use of electronic health record systems. But these implementations may not ready these practices for future needs. Implementations have typically been done with an eye towards automating documentation, securing remote access and supporting processes necessary to secure reimbursement with current payer-driven models.

Now—with emerging models of accountable care and medical homes, we are seeing a significant shift to more quality-driven care. In this respect we are finding that a minority of our membership—only about 20–30 percent—have implemented the tools to be ready for this change. Examples of what’s needed include population management tools, quality-based reporting and so on.

#### **How else is the shift toward accountable care driving the need for health information technology?**

Well—you need to look at all participants in a patient’s care and their relationships. Today patients see their family practitioner and any number of specialists. Nurses, physician assistants and pharmacists are also involved in this care. Using today’s models of communication, the relationships between all these parties can be fragmented. Accountable care models and medical homes will work effectively only if the communication between these parties can be conducted in a seamless, interoperable manner.

#### **And how are practitioners reacting to government efforts to boost use of HIT?**

The incentive programs have given HIT a real boost, that’s for sure. But recognize that doctors are looking for ways of using their systems to both care for their patients and ensure that they are making the proper documentation to get reimbursed under these programs. I consistently hear from doctors during our AAFP forums that their systems do not always support the type of information capture and support necessary.

For instance, they are required to review history, capture their information to document the care that was delivered and then capture information to support population based reporting. And all during a seven-minute patient visit.

#### **So what is an “ideal” state moving forward?**

The promise of HIT is the ability to use delivered, structured, codified clinical data in a way that offers meaningful clinical decision support to physicians.

In fact, the scope is larger than that. Given the busy nature of today’s practices, this support can help spread responsibilities to the most appropriate healthcare providers. For instance, tools may identify a need for a mammogram—which then triggers tasks for a referral specialist to manage. Then that referral, along with the patient’s information, can be sent electronically to the specialist of the patient’s choice.

What’s more, all of this data can generate quality measurement information that can be delivered to health systems to demonstrate the value of the care received and to establish benchmarks in care.

#### **And how is e-prescribing related to all this?**

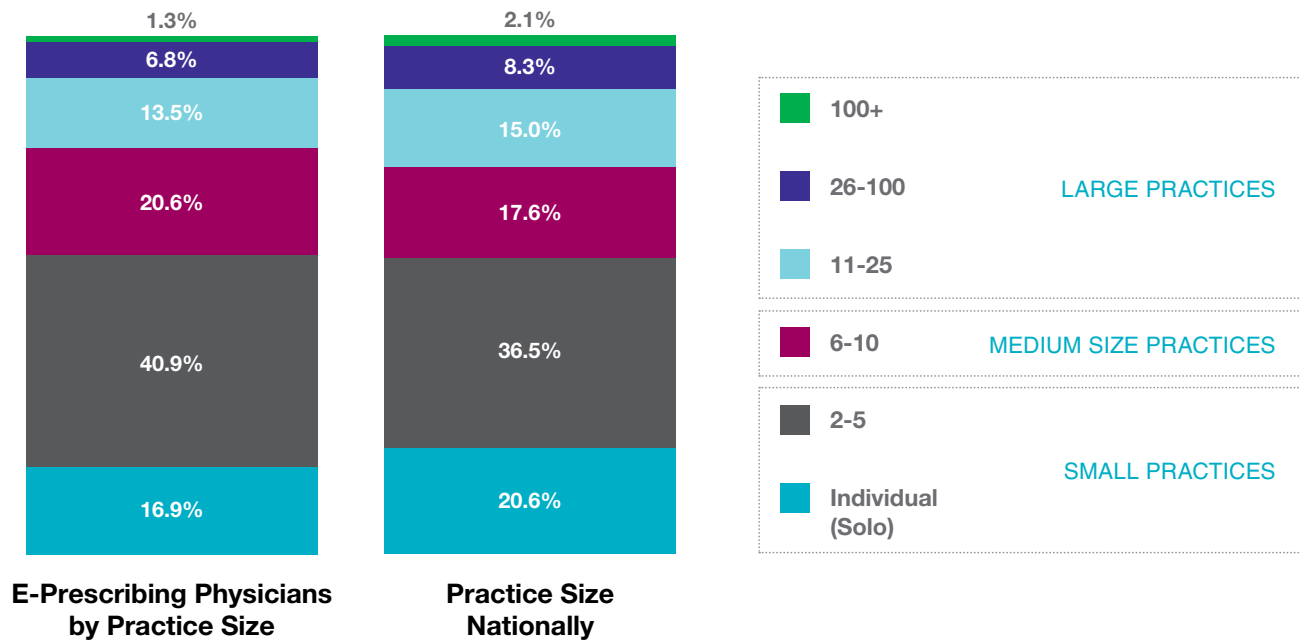
E-prescribing has not just built efficiency within the prescribing system, it has demonstrated the value of clinical messaging. But overall e-prescribing has been a real success story and I think it’s because it’s been built on a very strong business model. Practices can see the value that replacing paper and fax with electronic communication has brought. Once this value is seen by the practices that start to use it, other physicians can be brought along.

Now with the need for broader types of clinical messaging we have the opportunity to learn from the e-prescribing model and leverage it toward new types of networking that can exchange a broader range of clinical information electronically.

## PART 2: ELECTRONIC PRESCRIBING ADOPTION

### E-PRESCRIBING PHYSICIANS BY PRACTICE SIZE

Surescripts estimates that physicians e-prescribing through the Surescripts network are representative of the following practice sizes.<sup>13</sup>



### PRACTICES WITH 2 TO 10 PHYSICIANS LEAD E-PRESCRIBING ADOPTION

#### E-Prescribing Adoption by Practice Size

Practice Size	% Active E-Prescribers	% EHR Users
100+	21.9%	99.3%
26-100	30.7%	93.3%
11-25	33.6%	84.5%
6-10	43.5%	79.9%
2-5	41.7%	73.8%
Individual (Solo)	30.6%	63.5%

## PHARMACIES—COMMUNITY AND MAIL ORDER

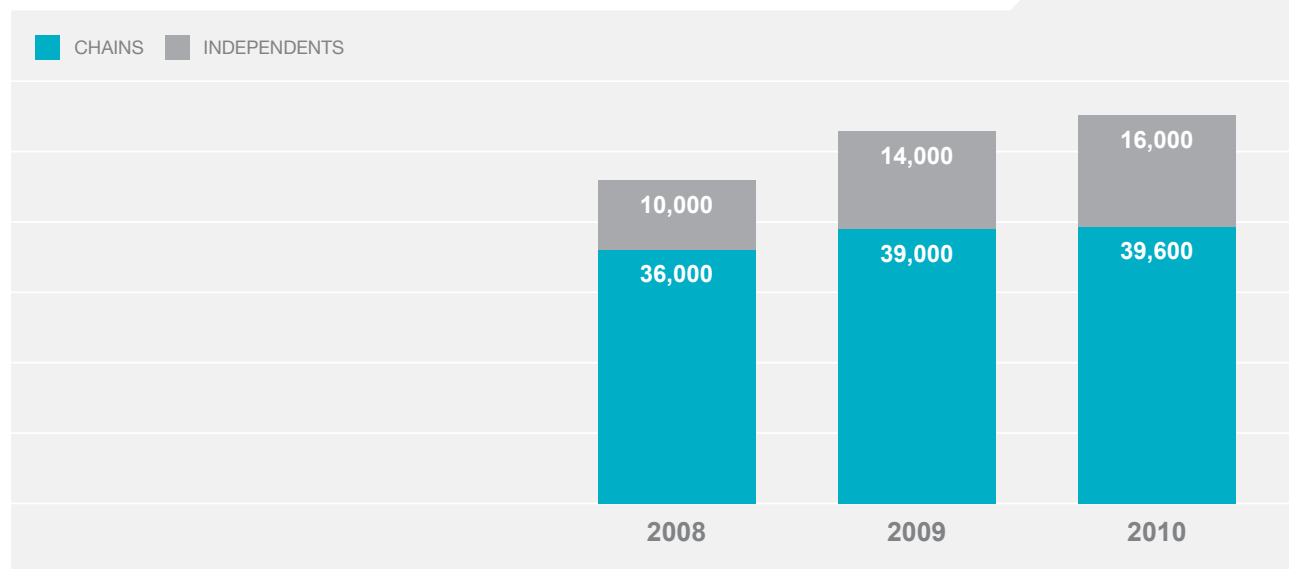
There are approximately 62,000 community pharmacies in the United States, representing both chain and independently owned pharmacies.<sup>14</sup> Of these, about 65 percent are chain pharmacies and 35 percent are independently owned (including those that are part of buying groups). In addition, PBMs and some chain pharmacies operate mail order pharmacies. Surescripts works with these pharmacies to provide prescription routing connectivity with 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.

91% OF THE NATION’S  
 COMMUNITY PHARMACIES  
 NOW ACCEPT  
 E-PRESCRIPTIONS

### KEY STATISTICS

- At the end of 2010, approximately 91 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.<sup>15,16</sup>
- More than 98 percent of chain pharmacies and 73 percent of independent pharmacies were connected to the Surescripts network for prescription routing in 2010.

### Community Pharmacies Connected for Prescription Routing



#### Supporting Data

Community Pharmacies Connected:	76%	85%	91%
Independent Pharmacies Connected:	46%	62%	73%

<sup>14</sup> Based on NCPDP data analysis.

<sup>15</sup> Note: In addition to retail and mail order pharmacies, Surescripts also connects some pharmacies associated with federal and state governments and with medical device manufacturers. For a list of e-prescribing pharmacies, go to [www.surescripts.com/connected-pharmacies.html](http://www.surescripts.com/connected-pharmacies.html).

<sup>16</sup> CVS Caremark, Express Scripts (WellPoint, NextRx), Medco Health Services, Prescription Solutions, Prime Therapeutics (Prime Mail) and Walgreens Mail Service.

## PART 2: ELECTRONIC PRESCRIBING ADOPTION

### E-PRESCRIBERS IN 19 STATES CAN NOW ACCESS PRESCRIPTION INFORMATION FOR MORE THAN 70% OF PATIENTS

#### PAYERS

The nation's public and private payers and their associated pharmacy benefit managers (PBMs) provide prescription benefit and medication 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 <http://www.surescripts.com/about-us/connected-payers.aspx>.

#### KEY STATISTICS

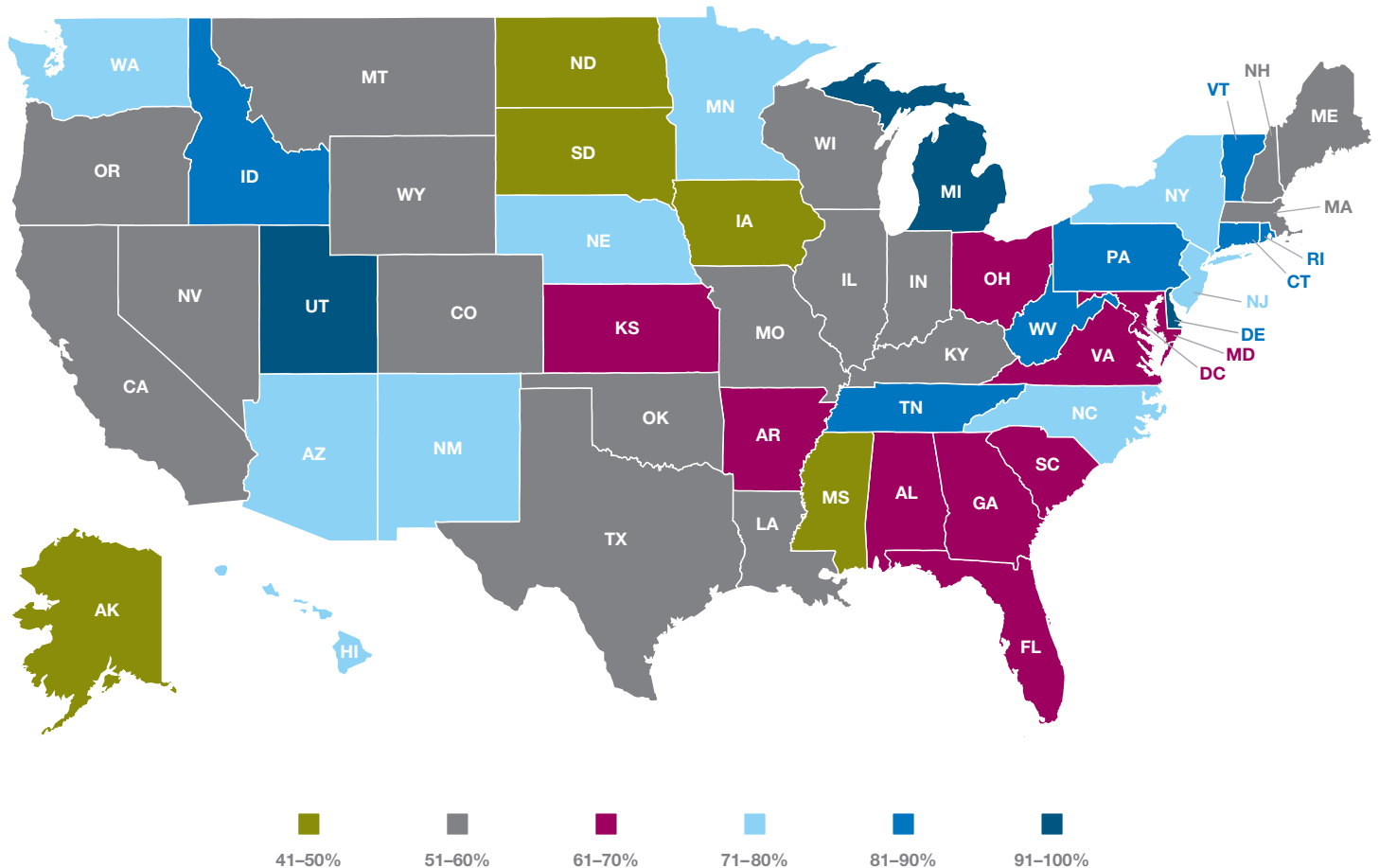
- At the end of 2010, Surescripts was able to provide access to prescription benefit and medication history information (on behalf of payers and pharmacies) for more than 66 percent of patients in the U.S.<sup>17,18</sup>
- By the end of 2010, participation by payers in e-prescribing allowed prescribers to locate and access more than 250 million member records from participating health plans.<sup>19</sup>
- In 2010, Surescripts provided access to more than 30,000 formulary files, including formulary status, coverage, co-pay and alternative medication lists maintained by participating health plans.

<sup>17</sup> Calculated by taking the number of records, less 19 percent for patients who have more than one source of prescription benefit coverage, and dividing it by the U.S. population figure of 309 million. 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, July 1, 2010.

<sup>18</sup> Surescripts suggests that payers can provide a medication 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 medication history.

<sup>19</sup> This figure is inclusive of records from all 50 U.S. states and the District of Columbia.

## PERCENTAGE OF PATIENTS FOR WHOM PAYERS CAN PROVIDE PRESCRIPTION BENEFIT AND MEDICATION HISTORY INFORMATION



## PART 3: INDUSTRY DRIVERS

### DRIVERS OF INTEROPERABLE HEALTHCARE IN 2010

#### HITECH AND THE GROWTH OF E-PRESCRIBING

##### **Federal incentives had significant influence on the number of prescribers who use e-prescribing.**

HITECH incentives were one of the most significant drivers of growth in 2010—especially for e-prescribing. 2011 will be a year with increased focus on utilization measurement.

The Health Information Technology for Economic and Clinical Health (HITECH) Act is a key component of the American Recovery and Reinvestment Act of 2009 (ARRA). The main goal of the HITECH Act is to encourage the adoption and meaningful use of electronic health records (EHRs) through incentive payments to physicians and hospitals.

Under the Act, eligible prescribers can receive incentive payments by meeting qualitative and quantitative standards for the meaningful use of a certified EHR, starting in 2011. As specified by the HITECH Act, e-prescribing is a key component of meaningful use requirements, including a mandatory requirement that EHR systems must be capable of electronic prescription routing to pharmacies, and that 40 percent of eligible prescriptions be sent in this manner during a reporting period.

Per federal rules released in July 2010, meaningful use is structured in three phases:

- 1) Capturing and sharing of data—current phase, Phase I (2011)
- 2) Advanced-care processes with decision support—Phase II (2013)
- 3) Improved outcomes and population management—Phase III (2014–2015)

The Act also makes provisions for incentive payments to support the acquisition and use of certified EHR technology for prescribers who treat high volumes of Medicaid patients. It also makes federal matching funds available for some state Medicaid plans for programs that encourage the adoption and use of EHR technology.

According to survey data released by the Office of the National Coordinator for Health Information Technology in January 2011, 81 percent of the nation's hospitals and 41 percent of office-based physicians intend to take advantage of federal incentive payments to increase their adoption and meaningful use of certified EHR technology.

Though ARRA incentives are expected to cover only a fraction of the costs involved in providing this technology, expected gains in efficiency and the potential for fewer adverse drug events promise to provide additional financial incentives for participants to make up the difference. For instance, a 2010 McKinsey report<sup>20</sup> suggests that the broad use of EHRs could lead to a combined savings of more than \$30 billion for hospitals alone.



## THE MIPPA E-PRESCRIBING INCENTIVE PROGRAM

### **Despite HITECH's greater visibility, the MIPPA incentive programs remained a key driver of e-prescribing growth in 2010—particularly for non-EHR practices.**

The Medicare Improvements for Patients and Providers Act (MIPPA)—introduced in 2009—offered a 2 percent bonus payment in 2010 for qualified e-prescribers that prepared and sent prescriptions to pharmacies electronically using a qualified e-prescribing system. Such systems could be imbedded in a practice's EHR, or used as a standalone application.

Such reimbursement levels are offered through 2013, with the maximum of 2 percent available in 2009 and 2010. Reimbursement will fall to 1.5 percent in 2011, 1 percent in 2012 and 0.5 percent in 2013. MIPPA also creates a penalty for prescribers who do not start using e-prescribing by 2012. Specifically, those prescribers will suffer a penalty on their Medicare reimbursements rates starting at 1 percent.

Given MIPPA's inclusion of both EHR-based and stand-alone e-prescribing technology as "qualified systems" under program requirements, MIPPA provides a way for practices to see the benefits of e-prescribing and benefit from incentive monies without a significant capital outlay.

The looming penalties in 2012 will be of concern to non-adopting practices and will influence acquisition of prescribing technology through 2011. That being said, practices should be reassured by the fact that requirements for compliance are relatively low. For instance, practices are only required to send 10 prescriptions electronically during Medicare visits in the first six months of 2011 to avoid MIPPA financial penalties for non-compliance in 2012, and only 25 during all of 2011 to avoid MIPPA financial penalties in 2013. Sending 25 prescriptions electronically in 2011 also qualifies practices for MIPPA financial incentives for the year.

## PART 3: INDUSTRY DRIVERS

### FOCUS: INTEROPERABLE HEALTHCARE AND THE IMPACT OF UPCOMING MEANINGFUL USE REQUIREMENTS

#### **Requirements for e-prescribing under meaningful use will drive utilization through 2015. Watch for the impact of initial reporting deadlines by October 1, of 2011.**

Under current Stage 1 meaningful use requirements, 40 percent of eligible prescriptions must be routed electronically to pharmacies. Participating physicians must demonstrate that they have met this standard to receive incentive dollars—making the measurement of e-prescribing use an important factor of program involvement.

In order to maximize potential incentive payments, physicians must file to receive benefits in 2011 or 2012. Since “demonstrated use” must progress for at least 90 days in a calendar year to be eligible, the 2011 deadline is September 30.

Proposed Phase 2 and Phase 3 meaningful use requirements will place increasing responsibilities on physicians to manage prescriptions electronically and to take advantage of available prescription benefit and medication history information that is able to be delivered to them electronically.<sup>21</sup> Requirements include:

- Routing of at least 50 percent of eligible electronic prescriptions to pharmacies in Stage 2 and 80 percent in Stage 3
- Use of electronically delivered prescription benefit information (patient formulary and benefits eligibility) to inform prescribing decisions
- Access to patient medication history information
- Electronic sharing of clinical information

For those who wish to take advantage of HITECH incentive dollars, the window to adopt electronic health record technology with full e-prescribing capabilities is closing. Physicians begin to lose opportunities to receive these financial incentives in 2013. Starting in 2015, penalties for non-adoption will begin.

## FOCUS: EHR CERTIFICATION

### **The infrastructure is now in place to allow physicians to identify/confirm eligibility of particular EHR systems under HITECH.**

Any EHR technology adopted under HITECH must complete a certification process designed to ensure that a particular system has the capabilities to allow participating physicians to meet meaningful use requirements. These include the ability to manage prescription information electronically.

In 2010, five organizations were designated by the Office of the National Coordinator for Healthcare Information Technology to certify these technologies. The federal government is keeping an updated list of products that have been certified, with over 200 listed at the end of 2010.

This listing may be found at <http://onc-chpl.force.com/ehrcert>. Products are certified as complete EHRs or modular systems, and linked to specific certification criteria. A specific ONC certification number is granted to each certified system which is essential to document in order to receive incentive payments.

In early 2011, Surescripts joined the list of organizations that have been granted ONC ATCB status. Surescripts is able to certify that e-prescribing functionality meets the requirements of the HITECH incentive program.

## PART 3: INDUSTRY DRIVERS

### FUTURE DRIVERS OF INTEROPERABLE HEALTHCARE GROWTH

#### IMPACT OF HEALTHCARE REFORM

##### **Beyond incentive dollars, PPAC provisions are driving use of health information technology.**

Under the rubric of healthcare reform, the Patient Protection and Affordable Care (PPAC) Act carries certain key provisions that helped drive the adoption of healthcare technology in 2010 and will continue to drive adoption and use during the next three to five years. These factors include:

##### **(i) Potential growth in the number of insured patients: (ii) Adjusted expense ratios for insurers:**

The PPAC Act suggests that 30 million additional lives will be covered over time. With increased demand for services, and pressure to shift reimbursement models from a volume basis to a value basis, Health IT demand from practices, hospitals and health systems will strengthen. This is particularly relevant with systems that enable stronger provider communication and access to timely, relevant clinical data and coverage information. The need for advanced electronic tools to manage claims-related data will be felt by payers too as their volume of claims increases. Lastly, an increased volume of office visits is expected to have a proportional effect on prescribing volume, with more prescriptions than ever before making their way to community and mail order pharmacies.

In October 2010, the National Association of Insurance Commissioners announced that certain IT expenses can be included as medical expenses when calculating an insurer's medical loss ratio under the PPAC. Under the Act, as of January 1, 2011, insurers will be required to spend 85 percent of large-group premiums and 80 percent of small-group and individual plan premiums (with certain adjustments) on healthcare, or to improve healthcare quality or return the difference to the customer as a rebate.

Expenditures made to facilitate communications between healthcare providers and their patients can fall under the 80–85 percent expense ratio—thereby encouraging investment in health information technology that can manage these communications electronically and thus increase the potential for quality improvements and efficiencies through streamlined workflow and the timely delivery of more robust clinical information.

## ELECTRONIC PRESCRIBING OF CONTROLLED SUBSTANCES

**Prescribers have long dealt with dual workflows due to the need to maintain paper- and fax-based prescribing for controlled substances. Now DEA regulations offer the opportunity to manage these prescriptions electronically.**

Starting June 1, 2010, the U.S. Drug Enforcement Administration (DEA) allowed prescribers the option of issuing prescriptions for controlled medications electronically, subject to requirements specified in the DEA's Interim Final Rule (IFR), published in the March 31, 2010 issue of the *Federal Register*.

By establishing a framework by which prescribers can manage controlled substances electronically, the DEA provides a path for prescribers to manage all their prescriptions within an electronic workflow, rather than forcing them to maintain parallel processes—paper- and fax-based methods for controlled substances and electronic processes for all other medications.

In order to electronically prescribe controlled substances (EPCS), prescribers must adhere to the following key DEA regulations:

- 1) They must use an e-prescribing application that is certified for this purpose.
- 2) They must complete an identity proofing process.
- 3) They must use a two-factor authentication process each time one of these prescriptions is issued.

### **Two-Factor Authentication Defined**

In addition to the use of an existing security feature within an e-prescribing application, prescribers must use a separate and distinct security feature to prescribe controlled substances. This could be a “hard token” such as a radio frequency identification device, a password from an independent password generator and so on.

With this it is expected that educational efforts must be undertaken to ensure that prescribers are comfortable with the workflow adjustments and hardware acquisition that are necessary to prescribe these medications electronically.

Surescripts has expressed its commitment to readying its network operations to supporting EPCS.

Surescripts' own research has suggested that prescribers have a strong desire to prescribe controlled substances electronically, with the consideration that new workflow processes needed to comply with DEA regulations will have an impact on adoption. Results from a fall 2010 prescriber survey conducted by Surescripts show that:

- Approximately three-quarters of prescribers are highly aware that the DEA now permits EPCS
- An equal proportion (74 percent) has a high degree of interest in EPCS
- The majority of prescribers—56 percent—want to prescribe controlled substances electronically as soon as possible once the service becomes available to them

Unfortunately, when presented with details regarding the DEA's ID-proofing requirements, prescribers with a high degree of interest in EPCS dropped from 74 percent to 56 percent.

These findings were consistent across practice sizes and most specialties. A higher degree of interest was shown by those in specialties who issue a higher proportion of prescriptions for controlled medications, such as psychiatry.

This suggests that a degree of care must be taken to put DEA requirements into proper context and to provide a clear workplan for the adoption and use of additional technologies required to be in compliance. This includes offering a variety of options for two-factor authentication to ensure that prescribers can select one that is best for their office workflows.

## PART 3: RECOMMENDATIONS

### SUPPORTING THE CONTINUED GROWTH OF INTEROPERABLE HEALTHCARE

Each year, Surescripts provides a series of recommendations within the *Report* to address issues that we believe need to be rectified to help make e-prescribing and interoperable healthcare standard practice. Our 2010 recommendations are summarized below.

**Drive utilization.** Continue to develop programs that focus on driving the utilization of e-prescribing and interoperable healthcare technologies.

**Bridge adoption gaps.** Government and industry must collaborate to address gaps in adoption by solo practitioners, independently owned pharmacies and state Medicaid programs.

**Promote clinical collaboration.** Support emerging models of collaborative care.

## 1. FOCUS ON UTILIZATION

### Status: Continued Identified Need—Carryover from 2009 National Progress Report

#### 2010 Assessment

Recent studies show that the use of e-prescribing within EHR systems continues to be sub-optimal. According to the Center for the Study of Health System Change,<sup>22</sup> of the 44 percent of physicians who report using EHRs (in part or in full), only 42 percent reported using an e-prescribing prescribing system.

Of these:

- 23% do not use it routinely
- 65% use it to check for adverse drug events (ADEs)
- 54% use it to transmit prescriptions to pharmacies electronically
- 34% use formulary features
- 23% use all features regularly

#### Recommended Actions

If e-prescribers are to achieve acceptable standards of utilization—with the most immediate need being the achievement of Phase 1 meaningful use requirements (at least 40 percent of eligible prescriptions are managed electronically)—public and private interests must provide the education and tools needed to do so.

Recommended actions include:

- Benchmarking data to assist prescribers in assessing system performance in relation to others in their area and against meaningful use requirements
- Definitive best practices with respect to user interfaces, data delivery and interpretation with associated certification
- Increased role of Regional Extension Centers to support such education

## PART 3: RECOMMENDATIONS

### SUPPORTING THE CONTINUED GROWTH OF INTEROPERABLE HEALTHCARE

#### 2. CLOSE GAPS IN ADOPTION

##### Status: Continued Identified Need—Carryover from 2009 National Progress Report

###### 2010 Assessment

**Solo Practitioners:** Although HITECH incentive programs are providing an impetus for solo practitioners to adopt electronic health record technology, the ability to recover the cost of implementing such technology is often hampered by lack of specialized IT staff who can support its implementation, and the time and training resources needed to support ongoing use.

**Independently Owned Pharmacies:** Compared with chain pharmacies, independents have adopted e-prescribing at a slower pace. The gap between independent/chain growth in e-prescribing connectivity has closed in the past year, but not to the extent that it can be considered equal.

Given the strong relationships that independent pharmacies often have with prescribers in their communities, their connectivity is important to promote more consistent prescribing workflows in the practice setting.

**State Medicaid Programs:** At the end of 2009, nine state Medicaid programs were able to provide eligibility and formulary information to prescribers electronically, with another seven in process. By the end of 2010, this figure had risen to 15 and five, respectively. While this demonstrates good progress, 30 state Medicaid programs have not yet made efforts to establish this connection.

###### Recommended Actions

Solo practitioners should be a special focus for educational and technical support programs led by payers, health systems and Regional Extension Centers to ensure that implementing and using such technologies happen in a way that minimizes workflow impact, especially during the first few months after its introduction.

State, private and local programs already working to encourage the adoption of health technologies must remember the independent pharmacy, as programs in North Carolina and New York have already done. Independent pharmacies in these states have adopted e-prescribing at a rate that is 15 percent and 10 percent higher—respectively—than the national average.

Any Medicaid program that has not yet undertaken planning to electronically provide prescription benefit information to prescribers in their respective states should take steps to do so. This will involve both state and federal legislative support and potentially incentives to encourage participation.



### 3. SUPPORT EMERGING MODELS OF COLLABORATIVE CARE

#### Status: New for Report

##### 2010 Assessment

The concept of patient-centered medical homes (PCMHs) and accountable care organizations (ACOs) promises better use of resources to enhance patient outcomes over time through a shift from quantity-based to quality-based medical care. Under these models, inpatient and outpatient care is coordinated among all physicians treating a patient. Compensation is based on the overall progression of patient responsiveness to assigned therapies versus a panel of patients with similar conditions.

As care broadens in this respect, reliance on health information technology to facilitate this communication becomes more and more important. The Centers for Medicare and Medicaid Services itself stated that the use of electronic health records with information-exchange capabilities (such as clinical decision support and access to the patient's medical records, lab results and medication history) was key to success as an ACO. This is understandable given that estimates suggest that the average Medicare patient sees seven physicians over a two-year period.<sup>23</sup>

##### Recommended Actions

Quality-driven collaborative care requires both the software technologies to store and interpret clinical information and the networking support to ensure smooth, effective communications among all participants in patient care.

This suggests both an expectation that regionally based networks developed by integrated delivery networks and health information exchanges will grow, and a limitation that will be faced by these same networks to develop effective networking communication with all needed participants in patient care.

Such technologies must ensure interoperability to leverage existing private and regional networks provided by health information exchanges, integrated delivery networks and electronic health record providers, and to provide access points for those who have no access.

23 2 primary, 5 specialty in 4 practices—Core Patterns in Medicare and Their Implications for Pay for Performance, *New England Journal of Medicine*, March 15, 2007.

## PART 3: ABOUT SURESCRIPTS

The Surescripts network supports the most comprehensive ecosystem of healthcare organizations nationwide. Pharmacies, payers, pharmacy benefit managers (PBMs), physicians, hospitals, health information exchanges and health technology firms rely on Surescripts to more easily and securely share health information.

Guided by the principles of neutrality, transparency, physician and patient choice, open standards, collaboration and privacy, Surescripts operates the nation's largest health information network. By providing that information for routine, recurring and emergency care, Surescripts is committed to saving lives, improving efficiency and reducing the cost of healthcare for all.

For more information, go to [www.surescripts.com](http://www.surescripts.com) and follow us at [twitter.com/surescripts](https://twitter.com/surescripts).

### WHY WE ISSUE THIS REPORT

With more than 34 percent of the nation's prescribers, 91 percent of the nation's community pharmacies and the nation's leading PBMs, payers and mail-order pharmacies managing prescriptions electronically through the Surescripts network, Surescripts can track important trends in the adoption and use of prescribing technologies. As of 2010, e-prescribing has become our nation's most commonly electronically exchanged form of clinical information.

With this unique vantage point, and driven by our corporate commitment to neutrality and transparency, Surescripts has issued the annual *National Progress*

*Reports on E-Prescribing* since 2008. Through this comprehensive report, we hope to show that the growth of e-prescribing adoption—and more important, its sustained use—can offer the industry an important bellwether for the adoption and use of health information technology as a whole.

And with the addition of network capabilities that support interoperable clinical communication between healthcare providers, Surescripts will expand this report moving forward to examine a broader range of data covering networked healthcare.

### THE SURESCRIPTS' ELECTRONIC PRESCRIBING NETWORK

Surescripts connects prescribers in all 50 states—through their choice of certified e-prescribing software—to the nation's leading payers, chain pharmacies and independent pharmacies.

Any e-prescribing software provider—including those offering standalone e-prescribing solutions and those that integrate e-prescribing capabilities into electronic health record systems—may connect their customers to Surescripts' secure nationwide e-prescription network, as long as they

have completed Surescripts' certification process. This process validates that the certified software is able to send and receive electronic messages in accordance with industry standards.

Surescripts certifies software used by prescribers, pharmacies and payers/PBMs for access to three main services: Prescription Benefit, Medication History and Prescription Routing.

### PRESCRIPTION BENEFIT SERVICES

Prescription Benefit—Ambulatory	Allows prescribers to request information on patient eligibility and formulary at the time of prescribing.
Eligibility Services—Pharmacy	Allows pharmacies to check patient eligibility, in real time, at the point of sale.
Eligibility Services—Medicaid	Allows Medicaid MMIS vendors to request pharmacy eligibility, in real time, from Surescripts before adjudicating a claim.

### MEDICATION HISTORY SERVICES

Medication History—Ambulatory	With a patient's permission, this service allows prescribers to securely access aggregated medication history data from community pharmacies and patient medication claims history from payers and PBMs.
Medication History—Acute	Allows prescribers and authorized staff in acute-care settings to query and receive aggregated details for up to a year's worth of patient medication history from payer and pharmacy records representing over 240 million patients.
Medication History—Personal Health Records (PHRs)	Allows patients who use select PHR technologies to receive their medication history information from retail pharmacies.

### PRESCRIPTION ROUTING SERVICE

Surescripts' Prescription Routing service allows prescribers to prepare and send a prescription directly to the computer at 91 percent of the nation's retail pharmacies, and six of the nation's largest mail order pharmacies. In turn, pharmacies can use this service to send requests for prescription renewals directly to the computer at a practice so that prescribers can review and respond to them directly.

# PART 3: ABOUT SURESCRIPTS

## THE SURESCRIPTS NETWORK FOR CLINICAL INTEROPERABILITY

In October 2010, Surescripts announced that it was expanding its network operations to establish the Surescripts Network for Clinical Interoperability™—a common and neutral point of connection to facilitate the secure exchange of clinical information between all types of healthcare providers.

This new network leverages Surescripts’ significant experience and business approach to electronic clinical message exchange to allow healthcare providers to exchange a wide array of clinical information—peer to peer—regardless of network affiliation or use of technology.

With its neutral approach to connectivity Surescripts NCI acts as a “network of networks”—permitting health systems, health information exchanges and electronic health record providers to connect their affiliated clinicians to their peers both locally and nationwide. This single point of access avoids the need to establish complex individual network connections and allows clinicians to maintain their relationship and user experience with their existing network solutions.

Connectivity to the Surescripts Network for Clinical Interoperability can be achieved through a suite of connectivity tools designed for flexible implementation and integration.

### The Surescripts Network for Clinical Interoperability supports transmission of a full range of clinical information:

- Discharge summaries
- Referrals
- Medication histories
- Continuity of care documents
- Structured and unstructured notes
- Lab results
- Immunization records

### Using a variety of protocols:

Including Surescripts’ network standards, Direct and NHIN Exchange Projects, HL7, and other meaningful use standards as they develop

### Supported by Surescripts’ established network services:

- Network Infrastructure
- Certification & Compliance
- Directory Management
- Customer Support & Education
- Security & Authentication
- Implementation

## SURESCRIPTS' CLINICAL INTEROPERABILITY TOOLSET

1) Surescripts Net2Net Connect	This tool allows network and technology providers to build a direct connection to Surescripts' national network.
2) Surescripts Message Stream	Offers all certified network connectivity services of Net2Net Connect and adds a rich set of management and storage tools applicable for internal and/or external communication.
3) Surescripts Clinical Messaging Portal	A simple, secure, browser-based portal for clinical interoperability that provides basic, reliable communication between providers through secure portal technology. Designed for those who do not have access to existing network-connected technology or for network providers who wish to provide an interim connectivity solution for their clients.

## SURESCRIPTS—VALUE-ADDED NETWORK SERVICES

In order to ensure the success of our health information network, Surescripts provides many services free of charge, including:

- **Certification**—Surescripts implements and consistently applies open standards for certification and implementation of technology systems.
- **Compliance**—Surescripts conducts audits of technology vendors and connected entities to ensure compliance with standards and commitments for connectivity.
- **Standards Development**—Surescripts works with NCPDP, CCHIT, HITSP and other standards bodies to develop, evolve and certify against industry technical standards.
- **Education and Collaboration**—Surescripts engages with national, state and regional entities, both public and private, to develop educational programs, adoption and utilization programs, quality initiatives, and dialogue to support ongoing growth in the adoption and meaningful use of e-prescribing and health IT.
- **Support**—Surescripts provides technical assistance and resources to support physicians, pharmacies, payers and vendors through its account team and its Electronic Prescribing Resource Center.
- **Monthly Participant Calls and Biannual Participant Workshops**—Surescripts hosts regular events with network participants to inform them of developments and best practices around e-prescribing.
- **Pilot Programs**—Surescripts participates in and supports CMS, AHRQ and other public/private pilot programs.

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For more information about Surescripts, visit [www.surescripts.com](http://www.surescripts.com) and follow us at [twitter.com/surescripts](https://twitter.com/surescripts).





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