

# 2019 IMPACT REPORT:

# PRESCRIPTION ACCURACY

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It's tough to measure the accuracy and quality of paper prescriptions. Thanks to the innovation of electronic prescribing, we can now track prescriptions digitally, to see gaps and errors more clearly. Simply put, e-prescribing has changed the way clinicians, pharmacists and patients interact around drug therapy—and we are now poised to fully leverage this technology to improve quality and reduce costs in healthcare.

But challenges remain: Each new prescription transaction involves more than 40 different elements. Each of these elements may cause one or more issues involving patient safety, administrative burden, and delays in getting medication into patients' hands.

The result?

Prescribers and pharmacists are forced to leave their workflow several times throughout the day to make phone calls, fight with fax machines, and make manual corrections to prescriptions. And these interruptions add up quickly and can cause the patient not to take the needed medication as intended. **Medication nonadherence creates up to \$300 billion in avoidable healthcare costs in the U.S. each year.<sup>1</sup>**

Within the next few years, virtually all prescriptions in the U.S. will be transmitted electronically, including those for controlled substances. We must reduce the error rate and improve efficiency in e-prescribing. Doing so will significantly improve the healthcare system's operational performance by streamlining workflow and clarifying prescriber intent.

Together, the entire Surescripts Network Alliance™ is committed to improving e-prescription accuracy for the benefit of prescribers, pharmacists and, most importantly, patients.



# IMPACT THAT MATTERS

Nearly two billion e-prescriptions are sent across the Surescripts network every year, and Surescripts Sentinel® measures the accuracy of each of these prescriptions. Quality benchmarks and report cards based on this data provide actionable intelligence to health systems, electronic health records (EHR) vendors, and retail and mail-order pharmacies, so that they can effectively identify and make corrections.

**Surescripts has increased the accuracy of e-prescription transactions 64% since 2016** by eliminating errors, inconsistencies and incompleteness, as well as increasing adoption of enhanced transaction types and improving alignment with the Surescripts directory.

## FROM THE FIELD

**“With the RxChange documents we’ve received, we’re saving 5-10 minutes per document, depending on the type.** Any time you can save 5 to 10 minutes on an interaction with a patient, it helps to prevent delays and patient wait times. Any efficiency that allow providers to go home sooner and see more patients is good!”

### A PRESCRIBER

**“RxChange is a big time saver and good for the patient ...** any phone call or fax is a disruption ... less confusion for the prescriber ... streamlines the workflow.”

### A PHARMACIST

**“I would love to see every pharmacy enabled for CancelRx ...** I have a preference for pharmacies using CancelRx.”

### A PRESCRIBER

**“I especially like the cancellation ability. It is very easy to use and does not interfere with my patient care. Now the pharmacy knows what I discontinued.”**

### A PRESCRIBER

**“Prescription management has always been important, but its complexity has changed significantly. Endless medication substitutions have been fueled by formularies, shortages and cost. The CancelRx and RxChange components simplify this process and tie all these changes together, providing the healthcare team with the most up-to-date medication list.”**

### A PRESCRIBER

# FEWER ERRORS:

## HELPING PATIENTS GET SAFE, EFFECTIVE CARE

Mismatched drug descriptions and drug identifiers, such as National Drug Code (NDC) and RxNorm, put patient safety at risk. We're working to pinpoint these discrepancies so that technology vendors can update their systems and ensure matching drug descriptions and NDC identifiers.

**Hypothetical patient scenario: Bob is an asthma patient who cannot operate the typical propellant inhaler because he also suffers from arthritis. As a workaround, the drug description within Bob's e-prescription calls for a dry powder inhaler. But there's a mismatch with the NDC identifier: It corresponds to a propellant inhaler. Unfortunately, the pharmacist dispenses a propellant inhaler, rather than a dry powder inhaler, as a result of the conflicting data.**

### DRUG DESCRIPTION:

Ambiguous drug descriptions confuse prescriber intent. Surescripts is working to automate drug look-up at the pharmacy by improving the use of e-prescribing preferred drug names (EPNs) from designated drug compendia sources. Surescripts has improved the rate of appropriate use of the Drug Description field among EHR vendors from **38% in 2016 to 62% in 2018**.

### DRUG IDENTIFIERS:

Missing or mismatched drug identifiers often cause incorrect dispensing (as in the hypothetical patient scenario above). Surescripts helps pharmacies avoid mismatches by working to improve the use of NDC identifiers based on designated compendia. Surescripts has improved the EHR utilization rate of NDC identifiers from **32.3% in 2016 to 55.3% in 2018**. The RxNorm utilization rate went from **27.7% in 2016 to 56.4% in 2018**.

### DUPLICATE TRANSACTIONS:

A duplicate transaction from the prescriber is a patient safety risk for the patient and the pharmacy. Today, **fewer than 1% of new prescriptions are duplicates**.



# REDUCED ADMINISTRATIVE BURDEN:

## FEWER FAXES & PHONE CALLS TO CLARIFY PRESCRIBER INTENT

“Take one tablet by mouth two times daily” can be written more than 800 different ways, confusing the patient, who may take the wrong dose.<sup>2</sup> And medication comes in a variety of forms—tablets, pills, packages—so it can be difficult for a pharmacist to know what the prescriber intends.

Standardized language (known as Structured and Codified Sig) helps patients avoid adverse health events and reduces administrative burden for prescribers and pharmacies. And the appropriate Potency Unit Code (PUC) helps pharmacists understand prescriber intent: not one package, but one tablet, for example. The end result: clear directions and increased speed to therapy.

**One pharmacy reported that e-prescriptions with Structured and Codified Sig language take 10 seconds less to fill each time (a 33% time savings), allowing more time for patient care.**

### POTENCY UNIT CODE (PUC):

If the PUC isn't specified, a phone call or fax may be needed to ensure that the correct units are dispensed. The use of PUCs among EHRs has remained relatively steady, increasing from **96% of all new prescriptions in 2016 to 96.6% of all new prescriptions in 2018.**

### STRUCTURED AND CODIFIED SIG:

Standardized patient directions supports greater automation and reduces rework. Surescripts is committed to expanding the use of valid Structured and Codified Sig elements. Surescripts has seen an increase in the utilization rate of Structured and Codified Sig among EHRs from **1% of all new prescriptions in 2016 to 4% of all new prescriptions in 2018.**

### DAYS SUPPLY:

If Days Supply is entered incorrectly, it can result in a phone call for clarification. This is particularly critical for opioid prescriptions, since Days Supply is required for Electronic Prescribing for Controlled Substances (EPCS) in some states. For opioid medications, Surescripts is working to confirm that Days Supply is calculated correctly based on patient directions. As of the end of 2018, Days Supply was entered correctly in **90% of all new prescriptions.**

### APPROPRIATE USE OF NOTES:

Free-text fields are notoriously prone to misuse. In the Notes field, inappropriate clinical information can significantly decrease operational efficiency at the pharmacy. Surescripts measures the appropriate use of Notes to ensure that these fields don't contain data, including benefits or diagnosis information, that should instead be placed in a structured field. As of the end of 2018, just **4% of new prescriptions incorrectly included benefits information in the Notes field and less than 1% of new prescriptions incorrectly included diagnosis information in the Notes field.**

## IMPROVED EFFICIENCY: NEW TRANSACTION TYPES REPLACE MANUAL PROCESSES

CancelRx and RxChange help to reduce administrative burden and increase operational efficiency. CancelRx allows prescribers to replace or modify prescriptions from inside their EHR workflow—rather than making phone calls and sending faxes to pharmacies. And RxChange lets pharmacists make modification requests to prescriptions electronically and within their workflow, streamlining communication with prescribers.

In addition, EPCS ensures a single, efficient e-prescribing workflow for all prescriptions, including opioid prescriptions.

**One pharmacist reports that she no longer has to send 50 faxes every day. And she can avoid costly delays to therapy when she needs to order a therapeutic alternative because of an adverse event or other issue.**

### CANCELRX & RXCHANGE:

Enhanced prescribing transactions enable seamless electronic communication and eliminate time-consuming phone calls, faxes and workarounds. As of 2019, Surescripts is sending an average of **2.5 million CancelRx transactions and more than 1 million RxChange transactions per month.**

### ELECTRONIC PRESCRIBING FOR CONTROLLED SUBSTANCES (EPCS):

The percent of prescribers enabled for EPCS increased from **14% in 2016 to 32% in 2018**. The percent of controlled substance prescriptions sent electronically increased from **11% in 2016 to 31% in 2018**, and we anticipate continued growth in use of EPCS as more state and federal laws take effect.

## MORE DIGITAL, LESS PAPER: DIRECTORY ALIGNMENT ENSURES PRESCRIPTIONS ARE TRANSMITTED ELECTRONICALLY

Up-to-date and accurate directory data helps to ensure that e-prescriptions are sent efficiently, without the need for phone calls and faxes. Surescripts assesses the alignment of 10 key prescriber fields in our directory and is working to increase use of the Learning Directory among EHRs and pharmacies.

### DIRECTORY INTEGRITY:

**In 83% of new prescription transactions**, the provider name and address fields align with the Surescripts directory.



# THE PATH TO PROGRESS

For many years, the industry's focus was on moving prescriptions efficiently, safely and reliably. In 2016, Surescripts introduced the Critical Performance Improvement (CPI) program to bring together hundreds of individuals representing EHR vendors, pharmacies, pharmacy benefits managers, health systems and drug compendia to improve patient care by enhancing e-prescribing accuracy and efficiency.

**Together, we've made incredible progress:**

**2001**

Surescripts is founded.

**2004**

**4% of physicians** adopt e-prescribing.

**2007**

Electronic prescriptions legal in **all 50 states**.

**2010**

Surescripts delivers **326 million electronic prescriptions**.

DEA regulation allows e-prescribing of controlled substances.

Surescripts establishes the White Coat of Quality Award.

**2012**

Surescripts delivers **788 million electronic prescriptions.**

**2015**

Electronic prescriptions for controlled substances legal in **all 50 states.**

**2018**

Surescripts re-launches the White Coat Award, celebrating high performing EHR vendors.

Surescripts processes **11.8 million CancelRx transactions.**

**2014**

Surescripts delivers **1.2 billion electronic prescriptions.**

**2017**

Surescripts convened CPI workgroups on a monthly basis.

Sentinel measured more than **3 billion total transactions.**

**2016**

Surescripts launches the CPI program, identifies and validates top e-prescribing pain points, and establishes workgroups.

Surescripts introduces Sentinel and measures over **1 billion e-prescribing transactions.**

**2019**

Surescripts expands eligibility of the White Coat Award to include health systems and the pharmacy industry.

**73% of prescribers** are utilizing e-prescribing.



Our purpose is to serve the nation with the single most trusted and capable health information network, built to increase patient safety, lower costs and ensure quality care. Since 2001, Surescripts has led the movement to turn data into actionable intelligence and convened the Surescripts Network Alliance™ to enhance prescribing, inform care decisions and advance the healthcare industry.

1. Aurel O. Iuga and Maura J. McGuire, "Adherence and health care costs," *Risk Management and Healthcare Policy* 7, February 20, 2014: 35-44, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3934668/>.
2. Yuze Yang et al., "Quality and Variability of Patient Directions in Electronic Prescriptions in the Ambulatory Care Setting," *Journal of Managed Care & Specialty Pharmacy* 24, no. 7 (July 2018): 691-699, <https://doi.org/10.18553/jmcp.2018.17404>