

2018 IMPACT REPORT: CLINICAL INTEROPERABILITY

In a year full of headlines and policy activity around interoperability, thousands of healthcare organizations were quietly making it a reality.

They were using Surescripts Record Locator & Exchange to give clinicians access to their patients' comprehensive clinical history at critical points of care—even if those patients' records were scattered across the country. They increased their ability to locate data from other health systems and reduced the chances of missing a key piece of a patient's history.

Every clinical history transaction they generated was a step toward a world where interoperability is a default part of any patient encounter—progress that has implications for the national health IT landscape, for health systems and for individual patients and clinicians. This report collects a year of data and on-the-ground reports from the Surescripts Network Alliance™ to illuminate the possibilities for nationwide interoperability as more organizations adopt tools like Record Locator & Exchange.

UNLOCKING BETTER, SAFER AND LESS COSTLY CARE

Today's care environment is fragmented for many patients. A study of Medicare beneficiaries found that patients saw a median of seven different healthcare providers across four different practices in a two-year period.¹ Another study found that 1 in 10 emergency department patients had been seen at a different hospital within the past 12 months alone.²

This fragmentation makes locating and accessing clinical records both more difficult and more critical for clinicians seeking to make the best care decisions. Lack of access to data hinders care coordination and risks overtreatment—two problems that, combined, cost the U.S. between \$183 and \$271 billion a year.³ If that lack of information leads to an incorrect diagnosis, it can even cost lives.

Record Locator & Exchange informs care decisions by expanding interoperability and providing access to clinical history information for 258 million patients (79% of the U.S. population).⁴ Leveraging the Carequality Interoperability Framework—which provides a common set of legal, technical and policy rules for data sharing across locations, care settings, networks and technology platforms—it lets clinicians quickly see where patients have received care and locate records from across the nation without leaving the electronic health record (EHR) workflow.

RECORD LOCATOR & EXCHANGE: RAPID GROWTH IN 2018

Clinicians utilizing	>106,000	105% growth
Active organizations	4,680	50% growth
Links to clinical document sources	108 MILLION	586% growth
Care location summaries exchanged	99 MILLION	52% growth

"Record Locator & Exchange is turbocharging the information we receive about patients as we're seeing them. It just makes it really easy to do the right thing."

- Dr. Nitu Kashyap, Associate Chief Medical Information Officer, Yale New Haven Health

IMPACT ON PATIENTS AND CLINICIANS: STORIES FROM THE FIELD

In 2018, we collected data and conducted interviews at health systems in California, Colorado and Connecticut who are using Record Locator & Exchange to enable interoperability. At each health system, clinicians could easily recall times when Record Locator & Exchange helped them make better treatment decisions in high-stakes situations. Here are some of the stories we heard from four areas where Record Locator & Exchange had an especially high impact:

PRIMARY CARE

A primary care physician saw a patient who had visited the ER while traveling out of state but didn't know the name of the hospital he'd visited or the diagnosis he was given. Through Record Locator & Exchange, the physician found the hospital, accessed CT scan results from his visit and realized he urgently needed to see a lung cancer specialist for further treatment.

EMERGENCY CARE

A patient arrived at a community hospital ER with symptoms suggesting a mild stroke. Record Locator & Exchange revealed that there was more to the story—and a need for more aggressive treatment. The patient had previously been treated for a very serious cardiovascular condition, so the ER physician arranged for immediate transfer to the university hospital.

QUALITY OF CARE

A primary care provider used Record Locator & Exchange to identify specialists who had provided care to patients with chronic diseases and ensure they received recommended screening tests, such as retinal exams for diabetes patients.

CARE COORDINATION

A transplant clinic shared two memorable cases. When clinicians used Record Locator & Exchange to review records for a new patient with lupus, they discovered she had an undisclosed blood clot in her heart and added blood-thinning medication to her treatment plan. Another patient arrived at the clinic denying that he'd ever been admitted for heart failure. His symptoms indicated otherwise, and so did Record Locator & Exchange: He'd been admitted for heart failure symptoms six times in the past summer. This knowledge proved crucial to his treatment regimen.

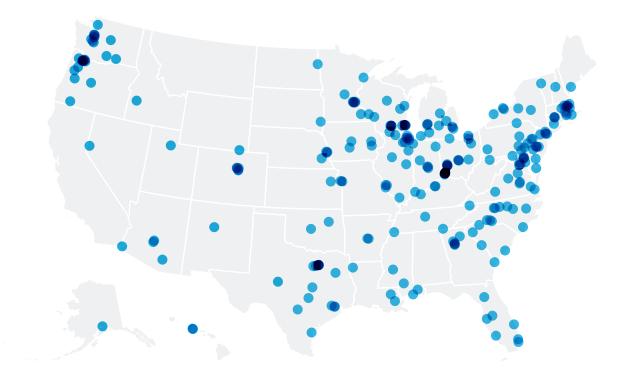
IMPACT ON HEALTH SYSTEMS: 3 EXAMPLES

Health systems using Record Locator & Exchange in 2018 gained critical treatment insights about their patients from care events that occurred hundreds and often thousands of miles away. Here are the trends in access to patient records we saw at three health systems in California, Colorado and Connecticut.

CALIFORNIA

The California health system we analyzed serves more than 1 million people each year. Our analysis found that its patient population is extremely mobile: Clinicians used Record Locator & Exchange to find visit locations and links to clinical documents across the U.S.

LOCATION OF PATIENT RECORDS IDENTIFIED OUTSIDE CALIFORNIA



Locations where links to clinical documents were found. Darker dots indicate more records located.

Adoption of Record Locator & Exchange spiked rapidly a few months after implementation, and in turn clinicians were able to access more and more clinical information each month.

NUMBER OF PATIENT RECORDS IDENTIFIED OUTSIDE CALIFORNIA

monthly average: 109,175

yearly total: 1,310,108

COLORADO

A Colorado health system used Record Locator & Exchange to get information on past patient visits that took place across the nation, from Alaska to Hawaii and from Oregon to New York.



LOCATION OF PATIENT RECORDS IDENTIFIED OUTSIDE COLORADO

• Locations where links to clinical documents were found. Darker dots indicate more records located.

When health systems tap into the Surescripts network, their access to clinical history data increases dramatically. By the end of 2018, the Colorado system was identifying care locations for more than 600,000 patient visits per month, many of which had links to clinical documents available.

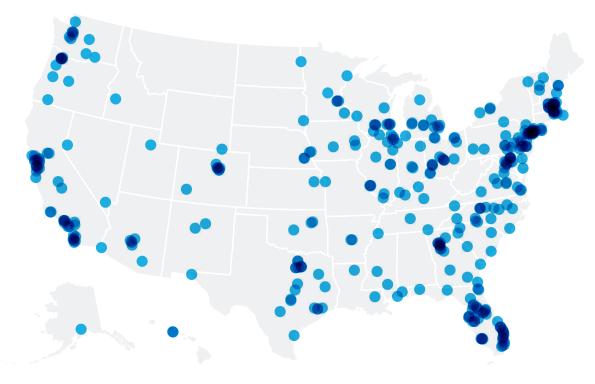
NUMBER OF PATIENT RECORDS IDENTIFIED OUTSIDE COLORADO

MONTHLY AVERAGE: 468,300

yearly total: 5,619,605

CONNECTICUT

During 2018, a Connecticut health system used Record Locator & Exchange to gain insights into more than 6.8 million summaries of historical patient visit locations.



LOCATION OF PATIENT RECORDS IDENTIFIED OUTSIDE CONNECTICUT

Locations where links to clinical documents were found. Darker dots indicate more records located.

Its clinicians also gained unprecedented access to hundreds of thousands of electronic links to records such as discharge summaries and continuity of care documents, which contain critical clinical information such as medical problems, medications, allergies, immunizations, lab results and physician notes. Easy access to this data made for better-informed treatment decisions.

NUMBER OF PATIENT RECORDS IDENTIFIED OUTSIDE CONNECTICUT

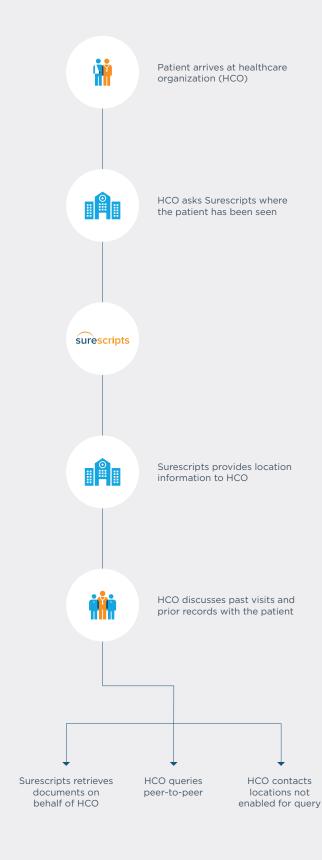
monthly total: 570,670

6,848,049

HOW RECORD LOCATOR & EXCHANGE DELIVERS ACTIONABLE PATIENT INTELLIGENCE

Without an interoperability solution like Record Locator & Exchange to inform their care decisions, clinicians have limited access to reliable, comprehensive clinical history for their patients. While some EHRs automatically query other locations, they typically have a limited default geographic radius. In those cases, getting the full picture would mean relying on patients to accurately recall every healthcare interaction they've had, or sending thousands of outbound queries to other organizations.

In 2018, we proved that it doesn't have to be so difficult. Record Locator & Exchange delivered comprehensive and straightforward insight into clinical history data for more than 100,000 clinicians, who gained access to more than 100 million links to clinical document sources to ensure safe, appropriate, top-quality care for their patients. For them, interoperability became a natural extension of the clinical workflows they were already using within their EHRs. While some barriers to full healthcare interoperability in the U.S. may remain, the past year's progress shows just how much the combination of committed healthcare professionals and a robust nationwide network can achieve.



- 1. Hoangmai H. Pham et al., "Care Patterns in Medicare and Their Implications for Pay for Performance," *The New England Journal of Medicine* 356, no. 11 (March 15, 2007): 1130-1139, https://www.nejm.org/doi/full/10.1056/NEJMsa063979.
- Lisa M. Kern et al., "Patients' Use of Multiple Hospitals in a Major US City: Implications for Population Management," *Population Health Management* 20, no. 2 (April 1, 2017): 99–102, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5749602/.
- 3. Donald M. Berwick and Andrew D. Hackbarth, "Eliminating Waste in US Health Care," *Journal of the American Medical Association* 307, no. 14 (April 11, 2012), 1513–1516.
- 4. Surescripts, "2018 National Progress Report," April 2019.



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.

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