

## Management Memorandum

**Date:** November 18, 2022  
**To:** Surescripts Management Team  
**From:** Lanxi (Nancy) Du, eHealth Data Analyst Intern  
**Subject:** Surescripts Network eRx Adoption and Use Jan 2016 – Apr 2019

The Surescripts Management Team has requested a review of the adoption and use of electronic prescribing (eRx) among community pharmacies and office-based healthcare providers active through the Surescripts Network. I am writing to provide a summary of health information exchange activities among the Surescripts Network across U.S. states and regions from January 2016 to April 2019. This summary highlights the states facing the greatest challenges in adopting and using eRx as well as major changes in adoption and use patterns over the time period.

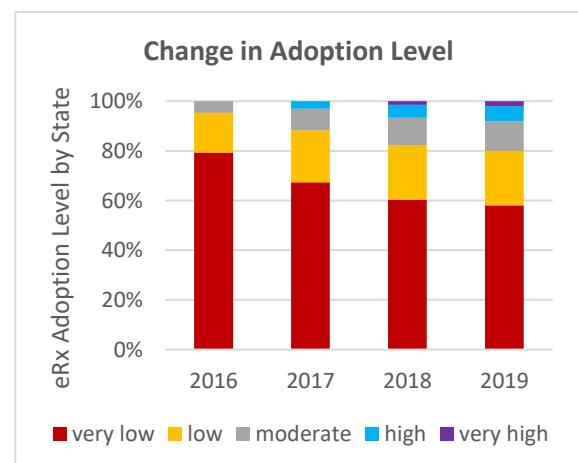
Within the January 2016 to April 2019 period, the total number of health care providers actively e-prescribing on the Surescripts Network (i.e., e-Prescribers) ranged considerably, with an average of 8,871.72 total e-Prescribers in a month. The lowest number of total e-Prescribers per month was 303, observed in the Mountain region during the first data period January 2016. The highest number of total e-Prescribers per month was 46,902, observed in the Pacific region during the last data period April 2019.

Overall, the level of eRx adoption was very low from January 2016 to April 2019. As seen in Table 1, 67.90% (1358) of the data periods had very low adoption. All regions had at least one state with very low levels of adoption. Only 3.70% (74) of the periods saw high or very high adoption levels. These were observed in the states California (Pacific region), New York (Middle Atlantic), Texas (West South Central), and Florida (South Atlantic). Notably, very high adoption periods were only observed in California, starting from April 2018 and continuing until the end the data period. New York, Texas, and Florida also demonstrated rapid growth as all three states started with low adoption levels and reached high adoption levels by September 2018. These higher adoption levels may be attributed to the fact that California, Texas, Florida, and New York are the states with the highest number of healthcare workers.<sup>1</sup> It is recommended that additional analysis be completed to determine the different factors that may be contributing to higher and lower adoption rates. While the majority of states had very low adoptions levels, the general trend shows total e-Prescriber numbers were rising as seen in the Change in Adoption Level figure.

**Table 1. eRx adoption level Jan 2016 – April 2019**

Adoption Level	Number of Data Periods	% of All Data Periods
very low	1358	67.90%
low	397	19.85%
moderate	171	8.55%
high	61	3.05%
very high	13	0.65%

One period is defined as one month. Where X is total number of e-Prescribers,  $X \leq 9,999$  is very low;  $10,000 < X \leq 19,999$  is low;  $20,000 < X \leq 29,999$  is moderate;  $30,000 < X \leq 39,999$  is high;  $X \geq 40,000$  is very high.



<sup>1</sup> U.S. Bureau of Labor Statistics, "Occupational Employment and Wages, May 2019" U.S. Bureau of Labor Statistics, 6 July 2020, accessed November 13, 2022, <https://www.bls.gov/oes/2019/may/oes290000.htm>.

All regions observed fairly high proportions of retail community pharmacies actively e-prescribing on the Surescripts Network. A state has “most” of its retail community pharmacies actively e-prescribing if 85% of pharmacies or more is observed. As seen in Table 2, the East North Central, Middle Atlantic, and New England regions saw most pharmacies actively e-prescribing in 100% of the periods. The West South Central region was the lowest with 90.63% of periods showing most pharmacies actively e-prescribing.

**Table 2. Pharmacies Actively e-Prescribing**

Region	% of All Periods where Most Pharmacies e-Prescribing
East North Central	100.00%
Middle Atlantic	100.00%
New England	100.00%
South Atlantic	98.44%
Pacific	97.00%
Mountain	94.38%
East South Central	93.75%
West North Central	91.79%
West South Central	90.63%

The average active e-prescribing rates in pharmacies across different regions is shown in Table 3. On average, all regions saw an increase in rates from 2016 to 2018. In 2018, New England was the highest performing region with an average of 96.28% of retail community pharmacies actively e-prescribing on the Surescripts Network. West South Central was the lowest performing region at 92.23%. As shown in Table 4, Maine, New Hampshire and Rhode Island were the highest performing states within New England. Louisiana and Arkansas were the lowest performing states. However, Louisiana has shown the greatest growth across all states, starting at 82.08% in 2016 and increasing to 91.83% of pharmacies in 2018.

**Table 3. Average percentage of pharmacies e-prescribing by region**

Regions	2016	2017	2018
East North Central	91.53%	94.37%	96.03%
East South Central	87.65%	92.71%	93.90%
Middle Atlantic	90.86%	94.39%	95.78%
Mountain	89.77%	93.45%	95.23%
New England	94.08%	95.24%	96.28%
Pacific	89.18%	92.30%	94.95%
South Atlantic	92.01%	94.58%	95.73%
West North Central	85.85%	91.93%	93.56%
West South Central	86.60%	90.67%	92.23%

**Table 4. Average percentage of pharmacies e-prescribing in the highest and lowest performing regions of 2018**

States	2016	2017	2018
<b>New England</b>	<b>94.08%</b>	<b>95.24%</b>	<b>96.28%</b>
Connecticut	91.17%	91.83%	92.33%
Maine	94.83%	97.33%	97.83%
Massachusetts	95.58%	96.25%	96.17%
New Hampshire	93.17%	95.42%	97.67%
Rhode Island	97.00%	96.75%	98.25%
Vermont	92.75%	93.83%	95.42%
<b>West South Central</b>	<b>86.60%</b>	<b>90.67%</b>	<b>92.23%</b>
Arkansas	86.08%	91.50%	91.83%
Louisiana	82.08%	87.58%	91.83%
Oklahoma	89.42%	92.08%	92.75%
Texas	88.83%	91.50%	92.50%

In conclusion, an increasing trend in adoption of eRx can be observed across all regions as the total number of e-Prescribers and the proportion of retail community pharmacies enabled on the Surescripts networks increased. States in the Mountain region had some of the lowest number of total e-Prescribers. New York (Middle Atlantic region), Texas (West South Central), and Florida (South Atlantic) saw rapid growth, moving from low to high adoption levels within the 3-year period. Arkansas and Louisiana (West South Central) had the lowest proportion of pharmacies activated to receive eRx; however, Louisiana showed the largest increase across all states, with a 9.75% increase from 2016 to 2018. By April 2019, all regions reached greater than 85% activation within pharmacies. It may be beneficial to explore the adoption processes used within the states of New York, Texas, and Florida to inform strategies for increasing eRx adoption and use by health care providers.

Sincerely,

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