RUPRI Center for Rural Health Policy Analysis
Rural Policy Brief

Brief No. 2020-7 **July 2020** http://www.public-health.uiowa.edu/rupri/

Telepharmacy Rules and Statutes: A 3-Year Update for all 50 States

Jason Semprini, MPP; Fred Ullrich, BA; Keith J. Mueller, PhD

Purpose

This policy brief updates previous RUPRI Center research surveying the legislative and administrative activity authorizing community-based telepharmacy. As the number of independently owned retail pharmacies in rural communities continues to decline, telepharmacy has become a popular tool for increasing access to health care providers and prescription medication. As access to pharmacy services in rural areas is critical, investigating the state-by-state variation in telepharmacy rules can help policymakers ensure that the continued implementation of this innovative pharmaceutical delivery system meets the needs of rural residents.

Key Findings

- Twenty-one states currently authorize the use of retail (outpatient) telepharmacy services.
- Ten states have implemented telepharmacy through legislation, while 11 states' pharmacy boards have regulated telepharmacy by administrative code.
- Through pilot programs, pending legislation, or proposed regulatory activity, six states have begun the process of permitting more expansive telepharmacy utilization.
- Telepharmacy is explicitly prohibited in only two states.

Background

In 2017, the RUPRI Center conducted the first-ever 50-state survey on telepharmacy rules and regulations.[1] In that same year, the American Society of Health-System Pharmacists released a statement of support for the continued implementation of suitable telepharmacy services, while the National Association of Boards of Pharmacy added telepharmacy guidance to their 2017 Model State Pharmacy Act.[2,3] Despite the recent growth in telepharmacy services, most telepharmacy research has focused on clinical settings (e.g., hospitals) in underserved areas, leaving retail telepharmacies largely understudied.[4,5,6] Meanwhile, the number of independently owned retail pharmacies continues to decline in rural areas.[7] The detriment of persistent community pharmacy closures, however, extends beyond lack of access to prescription medications—closures create a void that clinical telepharmacy services may find difficult to fill, especially in communities where the community pharmacy was the sole health care provider.[8] Greater diffusion of community-based telepharmacy can potentially mitigate this negative trend.[9]

This project was supported by the Federal Office of Rural Health Policy (FORHP), Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS) under cooperative agreement/grants #1U1GRH07633 and #U1CRH20419. The information, conclusions and opinions expressed in this policy brief are those of the authors and no endorsement by FORHP, HRSA, HHS is intended or should be inferred.

RUPRI Center for Rural Health Policy Analysis
University of Iowa College of Public Health
Department of Health Management and Policy
145 Riverside Dr., Iowa City, IA 52242-2007
(319) 384-3830
http://www.public-health.uiowa.edu/rupri
E-mail: cph-rupri-inquiries@uiowa.edu

This policy brief provides a timely update on the status of community telepharmacy implementation. In an environment of persistent rural pharmacy closures, an improved understanding of the state variation of community telepharmacy implementation strategies can assist policy makers evaluating the expansion, as well as the effect, of telepharmacy rules and regulations.

Data and Methods

Using the previous RUPRI publication as a guide,[1] we analyzed the most recent versions, as of January 31, 2020, of all administrative rules and legislative statutes governing each state's pharmacy practice. All 50 states were included in the analysis; the District of Columbia was excluded. Once rules specifically relating to telepharmacy were identified, key features of telepharmacy regulations were investigated in detail for further comparative analysis: geographic and distance restrictions, facility restrictions, permitted providers, staffing requirements, and interstate accessibility. In states without existing telepharmacy rules or statutes, pharmacy board records were explored to identify any explicit restrictions or permissions on remote dispensing or other telepharmacy activities. The data gathering concluded with a search for pilot programs, demonstration waivers, and pending legislative activity for states without current telepharmacy rules or legislation.

For the purpose of this study, telepharmacy refers to a licensed pharmacist using technology to remotely dispense medication and provide counsel to patients in a retail (outpatient) setting. States will qualify as permitting telepharmacy only if they authorize the operation of telepharmacies for drug delivery to the retail (outpatient) market. States specifically limiting telepharmacy use to hospitals, institutions, or automated dispensary devices were considered lacking telepharmacy permissions.

Findings

Table 1 identifies the implementation of telepharmacy for all 50 states as of January 31, 2020. Of the 21 states that currently authorize telepharmacy, 10 states have implemented it via legislation and 11 states via administrative code. Only two states, Hawaii and Missouri, have current pilot programs authorizing telepharmacy. Since the previous report, Arizona and California have transitioned from a pilot program to full authorization of telepharmacy via state legislation. New York and Washington State lawmakers also proposed telepharmacy legislation in 2019. Still, most states (29) do not currently explicitly authorize telepharmacy (either by statute or administrative code) in community settings. Many of these states permit institutional or nondispensing telepharmacy, except Ohio and Pennsylvania, whose administrative code explicitly requires direct supervision by a licensed pharmacist.

Compared to the growth between 2010 and 2016, recent telepharmacy diffusion has been modest. Only 2 states transitioned from a pilot program to full authorization, and only 1 state with no previous telepharmacy permissions implemented a pilot program. Still, with 2 states awaiting the passage of pending legislation (NY, WA), 1 state board creating a telepharmacy taskforce (NC), and 1 state board submitting a policy statement supporting telepharmacy development (MA), this innovative delivery model maintains momentum. And although state implementation has slowed since 2010, state regulatory activity has increased, signaling continued interest by pharmacy boards and elected officials.

Table 1. States Authorizing Telepharmacy

Telepharmacy permitted by state legislation	AZ, CA, CO[1], IL[1], IN, MI, NE, NV[1], SD, UT
Telepharmacy permitted by administrative code (board of pharmacy)	AK, ID, IA, LA, MN[2], MT, NM, ND, TX, VT, WY
Telepharmacy permitted by waiver or pilot program	HI, MO
Telepharmacy permitted, but either nondispensing, automated dispensary devices, or institutional site only	AL, AR, CT, DE, FL, GA, MA[2], ME, MS, NH, OK[3], TN[4], WA[5], WV, WI
Telepharmacy is explicitly prohibited	OH, PA
Complete absence of language related to telepharmacy	KS, KY, MD, NJ, NY[5], NC[6], OR, RI[6], SC, VA

[1] State has authorized telepharmacy by legislation and administrative code
[2] Telepharmacy authorized by board guidance or policy statement only.
[3] Oklahoma expanded a pilot program that created a virtual pharmacist platform for Medicaid Enrollees with a chronic condition.
[4] Tennessee created a pilot program that authorizes telepharmacy practice between central and satellite Federally Qualified Health Centers.
[5] State has a pending bill authorizing noninstitutional telepharmacy.
[6] State's board of pharmacy in process of creating rules for telepharmacy.

Among states that authorized telepharmacy via statute or administrative code, rules vary considerably. Table 2 highlights the extent to which states have regulated or restricted telepharmacy operations. For the purposes of Table 2, only states with existing telepharmacy authorization are included.

- Fifteen states (65 percent) impose a geographic restriction on newly licensed telepharmacies. Among these 15 states, 7 require the remote location to be greater than 10 driving miles from the nearest nonremote pharmacy (6 states require 20 driving miles). In addition to the 6 states without a geographic restriction, 2 states allow the proposed remote facility to waive the location requirement.
- While most states' facility specifications for nonremote versus remote pharmacy locations do not differ, the number of states regulating remote-dispensing sites has increased from 6 to 11 (26 percent to 48 percent) since the initial survey. These facility regulations are highly variable between states. For example, Arizona, Louisiana, and Wyoming state a minimum size of site, while California and Iowa state a maximum distance between the remote location and central pharmacy location.
- Nearly all states (20) permit only certain staff to work at a remote-dispensing location. However, the permitted providers differ by state. Along with a remotely supervised pharmacy technician, 8 states permit a pharmacy tech intern or trainee to work under remote supervision. Only Illinois permits student staff to work under remote supervision. Texas allows licensed healthcare providers in addition to pharmacy technicians and trainees. Idaho, having recently revised their board of pharmacy rules, does not differentiate staff requirements between telepharmacy and general pharmacy practice.
- In addition to only permitting certain staff on-site, most states require extra qualifications for employees at remote-dispensing locations. Fourteen states (61 percent) require more extensive training, certification, and work history for pharmacy technicians. These requirements include minimum hours worked, minimum years' experience, and additional training programs. Six states (26 percent) require maximum staffing ratios for supervising pharmacists, ranging from 2:1 to 6:1. Only two states' staff ratios are ambiguous. Idaho, Iowa, Indiana, and Vermont describe circumstances requiring a licensed pharmacist to be on-site at the remote-dispensing location.
- Previously, only five states regulated the interstate accessibility of telepharmacy. Now, 16 states explicitly affirm the restriction or permission of interstate telepharmacy

practice. Ten states confine all telepharmacy activity and supervision to within the state. Two states, Illinois and Vermont, explicitly permit nonresident pharmacies to supervise remote-dispensing sites. Colorado, Iowa, and Vermont permit nonresident pharmacists to gain licensure for telepharmacy supervision.

Among states that authorized telepharmacy via statute or administrative code, rules vary considerably. Table 2 highlights the extent to which states have regulated or restricted telepharmacy operations. For the purposes of Table 2, only states with existing telepharmacy authorization are included.

A more detailed information of rules and regulations in states permitting telepharmacy can be found at the RUPRI website: https://ruprihealth.org/publications/policybriefs/2020/Telepharm%20Supplemental%20Table.pdf

Table 2. State Rules/Regulations Governing Telepharmacy Implementation
State rules/statutes containing language limiting telepharmacy implementation are indicated with an 'X.' The absence of an 'X' indicates a state has no telepharmacy-specific rule or regulation for that topic. For a more detailed table, see the RUPRI Center website (ruprihealth.org).

State	Geographic Restrictions	Facility Restrictions	Permitted Providers	Staffing Requirements	Interstate Accessibility
ALASKA	X		X	X	X
ARIZONA		X	X	X	X
CALIFORNIA	X	X	X	X	X
COLORADO	X	X	X	X	X
IDAHO		X		X	
ILLINOIS		X	X	X	X
INDIANA	X	X	X	X	X
IOWA	X	X	X	X	X
LOUSIANA	X	X	X	X	X
MICHIGAN	X		X	X	X
MINNESOTA	X		X	X	
MONTANA	X		X	X	
NEBRASKA	X		X		X
NEVADA	X		X	X	X
NEW MEXICO	X		X	X	X
NORTH DAKOTA			X	X	X
SOUTH DAKOTA		X	X	X	
TEXAS	X	X	X	X	
UTAH			X		X
VERMONT	X		X	X	X
WYOMING	X	X	X		

Discussion

Telepharmacy in the community setting has not been extensively investigated for its effect on patient and provider outcomes, and even less attention has been given to telepharmacy's relationship to rural pharmacy closures. Yet despite its infancy, the telepharmacy market is predicted to exceed $3.2 billion in 2020.[9] By increasing access to medications and counseling, while also decreasing the driving distance and wait times, telepharmacy has been shown to substantially improve patients' retail pharmacy experience.[10,11] However, despite the obvious benefits, financial and regulatory barriers may be limiting wider telepharmacy diffusion. Early

reports indicate that because of lower initial capital and operating costs, telepharmacies earned revenue above the industry average and were self-sustaining after 1 to 2 years of business.[12,13] However, no follow-up research has evaluated the sustainability of this business model or attempted to generalize the findings to telepharmacies in different regions. Even in states currently authorizing telepharmacy, additional policies may be warranted to address the amplified potential for market saturation in low-density areas potentially prohibiting commercial telepharmacy development.[14]

As more states implement and adapt telepharmacy programs, identifying the determinants of telepharmacy implementation will help policymakers develop a portfolio of solutions in states confronting continued rural pharmacy closures. Additional evaluation of remote-dispensing rules, however, may be necessary to further validate telepharmacy as an innovative, profitable, and complementary model of health care service delivery in rural regions.

References

1. Tzanetakos, G., Ullrich, F., & Mueller, K. (2017) Telepharmacy Rules and Statutes: A 50-State Survey. RUPRI Center for Rural Health Policy Analysis, 4. https://rupri.public-health.uiowa.edu/publications/policybriefs/2017/Telepharmacy%20Rules%20and%20Statutes.pdf
2. Alexander, E., Butler, C. D., Darr, A., Jenkins, M. T., Long, R. D., Shipman, C. J., & Stratton, T. P. (2017). ASHP Statement on Telepharmacy. American Journal of Health-System Pharmacy, 74(9), e236–e241. https://doi.org/10.2146/ajhp170039
3. National Association of Boards of Pharmacy. Model State Pharmacy Act and Model Rules of the National Association of Boards of Pharmacy. https://nabp.pharmacy/publications-reports/resource-documents/model-pharmacy-act-rules/
4. Baldoni, S., Amenta, F., & Ricci, G. (2019). Telepharmacy Services: Present Status and Future Perspectives: A Review. Medicina, 55(7). https://doi.org/10.3390/medicina55070327
5. Kane-Gill, S. L., Niznik, J. D., Kellum, J. A., Culley, C. M., Boyce, R. D., Marcum, Z. A., … Handler, S. M. (2017). Use of Telemedicine to Enhance Pharmacist Services in the Nursing Facility. The Consultant Pharmacist : The Journal of the American Society of Consultant Pharmacists, 32(2), 93–98. https://doi.org/10.4140/TCP.n.2017.93
6. Littauer, S. L., Dixon, D. L., Mishra, V. K., Sisson, E. M., & Salgado, T. M. (2017). Pharmacists providing care in the outpatient setting through telemedicine models: A narrative review. Pharmacy Practice. https://doi.org/10.18549/pharmpract.2017.04.1134
7. Salako, A., Ullrich, F., & Mueller, K. J. (2018). Update: Independently Owned Pharmacy Closures in Rural America, 2003-2018. RUPRI Center for Rural Health Policy Analysis, 6. https://rupri.public-health.uiowa.edu/publications/policybriefs/2018/2018%20Pharmacy%20Closures.pdf
8. Todd, K., Ullrich, F., Mueller, K., & RUPRI Center for Rural Health Policy Analysis, University of Iowa College of Public Health, Department of Health Management and Policy. (2013). Rural pharmacy closures: Implications for rural communities. RUPRI Center for Rural Health Policy Analysis, (2012 5), 1–5
9. Duff BL. How pharmacy will change in 2019: four trends that will shape business and the profession. Drug Topics. 2019;163(1):14-18
10. Sarkar, R., Metzger, B., Sayre, H., Slater, C., Katamneni, S., Coustasse, A., & Drph. (2018). Telepharmacy and Access to Pharmaceutical Services in Rural Areas Telepharmacy and Access to Pharmaceutical Services in Rural Areas. Journal of AHIMA / American Health Information Management Association.
11. Brown, W., Scott, D., Friesner, D., & Schmitz, T. (2017). Impact of telepharmacy services as a way to increase access to asthma care. Journal of Asthma, 54(9), 961–967. https://doi.org/10.1080/02770903.2017.1281292
12. McCarthy D, Nuzum R, Mika S, Wrenn J, Wakefield M. The North Dakota experience: Achieving high-performance health care through rural innovation and cooperation. New York, NY: The Commonwealth Fund; 2008.
13. Gilman, M., & Stensland, J. (2013). Telehealth and Medicare: Payment Policy, Current Use, and Prospects for Growth. Medicare & Medicaid Research Review, 3(4). https://doi.org/10.5600/mmrr.003.04.a04
    Khan, S., Snyder, H. W., Rathke, A. M., Scott, D. M., & Peterson, C. D. (2007). Is There a Successful Business Case for Telepharmacy? *Telemedicine and E-Health*, *14*(3), 235–244. https://doi.org/10.1089/tmj.2007.0045