



Pharmacist Scope of Practice

Executive Summary

Professional pharmacists are often required to have a Doctor of Pharmacy degree, pass a licensure exam, and earn state board approval. Both state legislative policies and changes in state pharmacy board policies have been amended in the last several years, expanding pharmacists' ability to provide services above traditional services (e.g, dispensing medications, immunizing, and initiating therapeutic regimens). In the Missouri 2022 legislative session, [HB 2452](#) proposes to expand pharmacists' authorized practices to include the administration of any medication (with some exceptions) authorized by the U.S. Food and Drug Administration, establish a medication therapy regimen plan (with a statewide standing order in effect), and recommends pharmacists obtain two hours of continuing education in suicide awareness and prevention.

Highlights

- In the state of Missouri (RSMo [338.010](#)), pharmacists are authorized to dispense medications with prescriptions, immunize, and prescribe medication therapy plans.
- Evidence exists for improved health access in rural communities when expanding pharmacists' scope of practice.
 - Modest increases in vaccinations have also been observed after expanding pharmacists' scopes of practice.
- States have also passed policies allowing pharmacists to administer COVID-19 vaccines, prescription of hormonal contraceptives, naloxone, and tobacco cessation aids, modification of prescriptions, limited emergency refills, and rapid diagnostic tests.

Limitations

- It is not guaranteed that modifications to pharmacist scope of practice will remove all barriers to access for expanded pharmacy services.

Research Background

What are Pharmacists Authorized to Do?

In May 2021, there were an estimated 311,000 pharmacists in the U.S., and nearly 9 in 10 Americans lived within 5 miles of a pharmacy. Pharmacists, at a minimum, are required to hold a bachelor's degree, and in most states a doctor of pharmacy degree (PharmD), and pass an appropriate licensure exam to practice (the [NAPLEX](#) and in some states, [MPJE](#) exams).¹ Pharmacists are often the first line of medical contact for patients in communities, and are trained to provide education on the safe use of prescriptions and over-the-counter medications in between appointments with a physician. Pharmacists often also serve an intermediary role

*MOST Policy Initiative, Inc. is a nonprofit organization that provides nonpartisan information to Missouri's decision-makers. All legislative Science Notes are written only upon request by members of the General Assembly. **This Science Note was published on 5/12/2022 by Dr. Ramon Martinez III Policy Fellow – ramon@mostpolicyinitiative.org.***

between patients and physicians along with other health and community care organizations, and social supports.²

In the state of Missouri (RSMo [338.010](#)), pharmacists must have a valid license to provide services such as dispensing medications with a prescription order, immunizing patients, and prescribing a medication therapy plan (which is the design, initiation, and monitoring of a medication regimen). Activities such as counseling on medication use, interpreting prescriptions, compounding of medications, participating in drug selection for the patient, prescribing nicotine replacement therapies, administrating the training and supervision of pharmacy technicians (including through video technology), and any other activities obligated by a statewide standing order are also authorized.³

Similar changes to the scope of practice of other medical professionals (such as nurses) are currently being considered. For more information, please see our Science Note: [Advanced Practice Registered Nurse Scope of Practice](#).

Research on Scope of Practice Expansions in Pharmacy

One comprehensive review of rural community pharmacies showed evidence for improved health access in the community when expanding scope of practice beyond supply and medicine management, including: 1) supporting health system navigation, 2) disease screening, 3) disease prevention through vaccination, 4) collaboration with other healthcare providers, and 5) referral to appropriate healthcare professional. This was attributed to reduced stigma among patients associated with pharmacy use, the close pharmacist-patient relationship in small towns that result in effective education and drug adherence, and dedication and attachment from pharmacists in the towns they practice.⁴

A 2019 report lists all services that expanded practices community pharmacies may provide, and what percentage of pharmacies in the country provide those services (**Table 1**).⁵

| Type of Service | % of Pharmacies Providing Service |
|--|--|
| Administering Vaccines | 90% |
| Medication Discounts | 83% |
| Naloxone Dispensing | 72% |
| Medication Therapy Management (optimizing therapy outcomes) | 66% |
| Tracking of Refills | 66% |
| Wholistic Monitoring of all Medications Taken | 43% |
| Monitoring for Taking Duplicate Drugs or Drug Interactions | 38% |
| Labeling and Direction for Drug Use | 26% |
| Opioid Tapering | 25% |
| Guidance for Management of Diseases | 24% |
| Distribution of Medical Equipment | 23% |
| Disease Testing and Treating | 19% |
| Administering of Other Injections | 18% |
| Combining of Several or Commercially Unavailable Medications | 13% |
| Genetic Testing/Counseling for Medication Efficacy | 3% |

Table 1: Services offered by Community Pharmacies as surveyed in the National Pharmacist Workforce Study.⁵

A 2018 policy review of 10 Western U.S. states found that state regulatory boards of pharmacy also differ significantly in their licensing and scope of practice regardless of state policies in place.⁶ One study found that since the **authorization for pharmacists to vaccinate was expanded in the U.S., a roughly 1.4% increase in immunizations in adults 65 years and older was observed.** Further, in states that required prescriptions prior to vaccination, immunization rates diminished.⁷

State and Federal Legislation

Introduced into the 2022 Missouri Legislative session, [HB 2452](#) makes modifications to the legal scope of practice and services that pharmacists are allowed to perform. This includes the administration of any medication (if called for in a statewide standing order) or vaccine (with the exception of cholera, monkeypox, Japanese encephalitis, typhoid, rabies, yellow fever, tick-borne encephalitis, and anthrax) approved by the U.S. Food and Drug Administration rather than the Centers for Disease Control and Prevention. The bill would additionally allow pharmacists to begin a medication therapy regimen plan (with a statewide standing order in effect) without the need of a physician’s order. The bill also recommends that all licensed pharmacists who are employed at a licensed retail pharmacy obtain two hours of continuing education in suicide awareness and prevention.

For more information on suicide education and prevention training programs, please see the Science Note: [Suicide Education and Prevention Programs](#).

Pharmacists have authority to vaccinate in every state, but each state decides the vaccines they can administer and to what age groups.⁸ In Delaware, action was taken to allow pharmacists with out-of-state licenses to practice in that state as a result of an emergency order. Other states in 2009 expanded pharmacist scopes of practice during the H1N1 influenza pandemic to administer vaccines against the disease.⁹ **Table 2** lists state legislative actions that have expanded the scope of practice for pharmacists.¹⁰⁻¹² Importantly, while many of these services have been expanded for pharmacists, **reimbursement for clinical services through private or public health insurance policies is still lacking and may serve as a barrier to service access.**⁷ Federal law also allows the Medicare program to reimburse medication therapy management services (via the 2003 [Medicare Prescription Drug, Improvement, and Modernization Act](#)), which are meant for pharmacists to optimize therapeutic outcomes.¹³

| <u>State Legislative Actions Expanding Pharmacists’ Scope of Practice</u> | <u>List of States</u> |
|--|--|
| Administration of COVID-19 Vaccine* | CA, IA, IN, ME, MN, NH, NY, VA, WI |
| Prescription of Hormonal Contraceptives | AZ, CA, CO, DC, HI, IL, MD, MN, NH, NM, OR, TN, UT, VA, WV |

| | |
|---|--|
| Prescription of Tobacco Cessation Aids and Medications | AR, AZ, CA, CO, IA, ID, IN, ME, MN, MO, NH, OH, OR, WV |
| Adapt or Modify Prescriptions from Physicians | CO, ID, IN, MD, ME |
| Pharmacists can dispense naloxone without a prescription | AK, AZ, NE, SC |
| Conditions established (statewide protocols) for when pharmacists can prescribe naloxone | CA, CT, IA, ID, KS, MA, ME, ND, NJ, NM, OK, OR, TN, VT, WV, WY, DC |
| Pharmacists provide limited emergency refills without a prescription | CO, OR |
| Broad authority (via collaborative practice agreements) to prescribe medications using a reliable rapid diagnostic test | ID, IL, MI, MN, MT, NE, NM, ND, SD, TN, UT, VT, WA, WI |

Table 2: Expansions of Pharmacy Scopes of Practice. This table shows legislative actions states have taken to expand the scope of practices that pharmacists can do that are above typical authorized practices like dispensing medications, immunizing, and initiating therapeutic regimens. *Note that the 2020 federal [Public Readiness and Emergency Preparedness Act](#) supersedes state policies, allowing pharmacists in all 50 states to administer the COVID-19 vaccine. Table is reproduced from the National Conference of State Legislatures and the National Alliance of State Pharmacy Associations.¹⁰⁻¹²

For more information on naloxone and naltrexone use, authorities for pharmacy distribution, and legislative attempts to address substance abuse, please see the Science Note: [Substance Abuse and Naltrexone Hydrochloride](#).

During the COVID-19 pandemic, executive order [EO21-09](#) was signed allowing pharmacies to administer authorized childhood vaccinations, COVID-19 vaccines, authorized COVID-19 therapeutics, and remote data entry for pharmacy technicians. This executive order expired on December 31, 2021. However the federal government emergency declaration under the [Public Readiness and Emergency Preparedness Act](#) remains in effect for pharmacies to administer the COVID-19 vaccine. Pharmacies and pharmacists continue to make access to boosters accessible via federal authorization.¹⁴

References

1. George, K. (2019). *Using Pharmacists to Provide Care in Rural Areas*, <<https://www.ncsl.org/blog/2020/08/03/using-pharmacists-to-provide-care-in-rural-areas.aspx>>.
2. Dolovich, L. et al. (2019). Pharmacy in the 21st century: Enhancing the impact of the profession of pharmacy on people's lives in the context of health care trends, evidence and policies. *Canadian Pharmacists Journal/Revue Des Pharmaciens Du Canada* **152**, 45-53.
3. MISSOURI PHARMACY PRACTICE GUIDE, (2021). <<https://pr.mo.gov/boards/pharmacy/practiceguide.pdf>>.
4. Taylor, S., Cairns, A. & Glass, B. (2019). Systematic review of expanded practice in rural community pharmacy. *Journal of Pharmacy Practice and Research* **49**, 585-600, doi:<https://doi.org/10.1002/jppr.1619>.
5. Arya, V., Bakken, B.K., Doucette, W.R., Gaither, C.A., Kreling, D.H., Mott, D.A., Schommer, J.C., Witry, M.J. (2019). *National Pharmacist Workforce Study - Final Report*, <<https://www.aacp.org/article/national-pharmacist-workforce-studies>>.

6. Adams, A. J. (2020). Regulating Pharmacy Practice: Analysis of Pharmacy Laws in Ten States. *Innov Pharm* **11**, doi:10.24926/iip.v11i4.3344.
7. Stoecker, C. (2021). Shooting from the 'Scrip: Scope of Practice Laws and Access to Immunizations in the Pharmacy Setting. *Vaccines (Basel)* **9**, doi:10.3390/vaccines9050444.
8. *State Immunization Policy Overview*, (2021).
<<https://www.ncsl.org/research/health/immunizations-policy-issues-overview.aspx>>.
9. Levisohn, A., and Higgins, E. (2020). *States Address Provider Shortages to Meet the Health Care Demands of the Pandemic*,
<<https://www.nashp.org/states-address-provider-shortages-to-meet-the-health-care-demands-of-the-pandemic/>>.
10. *Scope of Practice Policy - Practitioner: Pharmacists*, (2022).
<<https://scopeofpracticepolicy.org/practitioners/pharmacists/>>.
11. *Pharmacist Prescribing: Naloxone*, (2019).
<<https://naspa.us/resource/naloxone-access-community-pharmacies/>>.
12. *Pharmacist Prescribing: "Test and Treat"*, (2019).
<<https://naspa.us/resource/pharmacist-prescribing-for-strep-and-flu-test-and-treat/>>.
13. Urick, B. Y. & Meggs, E. V. (2019). Towards a greater professional standing: evolution of pharmacy practice and education, 1920–2020. *Pharmacy* **7**, 98.
14. Levisohn, A., Cooper, R., Rosenthal, J. (2021). *States Quickly Retool Strategies to Maximize Vaccination Coverage*,
<<https://www.nashp.org/states-quickly-retool-strategies-to-maximize-vaccination-coverage/>>.