

COMMENTARY

COVID-19: How Can Rural Community Pharmacies Respond to the Outbreak?

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The global impact of Coronavirus disease (COVID-19) has been overwhelming, and the public health threat it represents is the most serious seen in a respiratory virus in modern times.^{1,2} In every affected country, the disease has impacted the global economy and threatened the health care system with new challenges. In the United States, the outbreak has quickly led to considerable morbidity and mortality, particularly in already fragile rural health care systems with inadequate staffing of health personnel, surveillance systems, diagnostic facilities, isolation rooms, and personal protective equipment. Rural communities are often isolated from large health centers with the capabilities of handling an outbreak such as COVID-19. Rural patients also face unique challenges such as extended travel time to an acute care facility, hazardous terrain, and the lack of reliable or public transportation. These geographic challenges may cause patients to postpone or go without accessing needed health services.³

Amidst the avalanche of reports concerning the spread of the virus, there is also recognition that pharmacists are in a unique position to make essential public health contributions, especially in rural areas, to address the shortage of primary care providers. Nurse practitioners and physician assistants are often listed as helping to reduce the shortages of rural providers but only account for 19% and 7% of the primary care workforce, respectively.³ Pharmacists are often overlooked in their ability to provide care in areas with primary care shortages. In fact, pharmacists are the most accessible health care providers, with about 90% of Americans living within 5 miles of a community pharmacy.⁴

When patients are experiencing mild illnesses such as the common cold or seasonal allergies, they often seek symptom relief from over-the-counter medications from their community pharmacies.⁵ Given the similarities in symptoms between COVID-19, cold, seasonal allergies, and flu, pharmacists can identify differences between flu and coronavirus symptoms and help patients navigate the health care system. Pharmacists can refer patients to the appropriate medical institution for testing, encourage them to seek treatment more rapidly, and provide information to limit the spread of this disease in the patients' community.

If an effective vaccine is developed to prevent COVID-19 infection, community pharmacists would be accessible health care providers to offer this immunization as evidenced by the growing number of patients receiving their influenza vaccine at local pharmacies. In recent years, pharmacies have become the most commonly used non-medical setting for flu vaccination in adults due to convenience and lower costs.⁶ In 2017, the CDC estimated 28% of adults received an influenza vaccine at a pharmacy, up from 23% in 2016.⁷ It has also been shown that immunization rates are higher among the high-risk group of patients aged 65 and older where pharmacists provide immunizations. Increased vaccination rates also lead to decreased deaths and hospitalizations among elderly patients, and should yield cost savings related to reductions in direct medical care.⁸

As treatment options for COVID-19 materialize, drug-drug interactions will increase and need to be managed. These interactions will be more prevalent in the elderly population because they are more likely to be taking

multiple medications for chronic conditions and are more likely to acquire serious illness from COVID-19 and require treatment. As medication experts, pharmacists play a critical role in detecting interactions and providing alternative therapies for patients. Pharmacists are already providing and being reimbursed for medication therapy management (MTM) services to Medicare patients, and being allowed to adjust medications will be an asset to the health care system.

The coordinated response to the COVID-19 pandemic is requiring the utilization and optimization of telehealth. Community pharmacies have been at the forefront of this technology.^{9,10} Rural communities across the United States are using telehealth to increase access to pharmacy services, commonly referred to as telepharmacy.¹¹ Telepharmacy has demonstrated value in patient counseling and monitoring, medication selection, and the provision of clinical services.^{12,13} The telepharmacy model has increased accessibility of health information and provided timely pharmaceutical services to rural communities.^{14,15} In areas with physician shortages, rural community pharmacies can help triage and refer patients to higher levels of care when diagnostic testing and further treatment is warranted. In addition to increasing community access to care, telepharmacy has also expanded the ability of rural community hospitals to provide 24-h pharmaceutical care. With the expected influx of COVID-19 cases, telepharmacy can be employed for remote order entry and medication approval, thereby decreasing the time to get needed medications to ill patients.¹¹

Although local, state, and national government and health care agencies are working to increase resources and access to care during this medical crisis, the COVID-19 pandemic has exposed some inefficiencies and inequities in the United States health system.^{16,17} Perhaps it is time for current and future legislation to consider expanding the role of pharmacists in primary care for underserved populations through Collaborative Practice Agreements (CPAs). CPAs are used to create formal relationships between pharmacists and physicians or other providers, allowing the pharmacist to provide expanded clinical services to patients and the health care team. CPAs define certain patient care functions that a pharmacist can autonomously provide under specified situations and conditions.¹⁸ Currently, 48 states and the District of Columbia have some form of CPA authority for pharmacists. Within those 49 jurisdictions, however, the extent of the authority and the types of requirements imposed by law on the practitioners are highly variable. Pharmacists being able to practice at the top of their licenses through CPAs will add a substantial number of highly skilled health professionals to the workforce, helping manage emerging demands placed on the health care

system as a result of the COVID-19 pandemic. Clinical services provided by pharmacists could not only include acute management and triaging of new COVID-19 cases, but also treatment of chronic disease states—already being managed under some CPAs.

Whether through a CPA or not, pharmacists should also be intensively integrated into ambulatory care clinics. Rural areas often have primary care clinics as well as Federally Qualified Healthcare Centers (FQHCs). Pharmacists could perform patient assessments, provide collaborative drug therapy management, and selection of drug therapy. Relinquishing some of the medication management responsibilities to the pharmacist also frees up time for primary care providers to devote to other duties, reduces patient wait times, and increases patient satisfaction. This would also attract another sector of the health care team to rural areas struggling to recruit primary care providers. Studies have shown that pharmacists working in this setting have a positive impact on clinical and cost outcomes and reduce hospital readmission rates. Expanding legislation to allow pharmacists to bill and be reimbursed for these services expands their role in primary care while providing needed services in underserved, rural populations.⁸ The American Society of Health-System Pharmacists (ASHP) has gone even further by providing a series of steps for state policy makers to ensure that pharmacists in their communities are enabled to effectively support prevention and response efforts for outbreaks such as COVID-19, including the ability to¹⁹:

- Ensure that pharmacists are authorized under a state pharmacy practice act to order and administer immunizations for prevention of infectious diseases
- Ensure that pharmacists are authorized under a state pharmacy practice act to order point-of-care testing for infectious diseases
- Ensure that pharmacists are authorized under a pharmacy practice act to initiate time-sensitive therapies, such as antivirals
- Ensure that pharmacists are reimbursed for direct patient care services related to prevention and treatment of infectious diseases
- Involve pharmacists in emergency response planning and coordination

Given the United States has now surpassed the world in the number of cases of COVID-19, all resources should be mobilized to reduce the spread of disease and provide treatment to those infected. By recognizing and expanding the role pharmacists play in delivering clinical services to patients, especially in rural areas, access to care will be increased and more treatment provided. Legislative

action should be taken immediately to ensure pharmacists are recognized as health care providers, as the difference between success and failure in responding to the current COVID-19 pandemic will depend equally on what is done now, and what will be done in the near future.

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