

The Status of Telepharmacy: Regulation and Application

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Purpose

Explore the current status of telepharmacy in selected states with high rural populations.

Introduction

Several factors have converged in the past several years which have challenged the viability of traditional community pharmacies and access to pharmacists in rural communities in the US. Workforce shortages, pharmaceutical payment policies within Medicare and Medicaid, and shifting demographics of new practitioner pharmacists are a few examples of issues affecting the rural pharmacy environment. As a result, many rural communities have lost or are at risk to lose access to traditional pharmacy services. Telepharmacy services is medication dispensing model that is being implemented in some areas as a substitute for traditional pharmacy services in both inpatient and outpatient settings.

Telepharmacy is a new and expanding practice that may significantly alter the way medications are obtained by rural-dwelling citizens. Because this practice is regulated at the state level and is heavily influenced by local demographics, and geography, implementation can be varied across the US. As this practice matures and expands, it is important to study the models that are developed, identify "best practices" and ensure that this practice evolves in a way that does not compromise the level of service patients would be able to obtain via services delivered in a traditional manner.

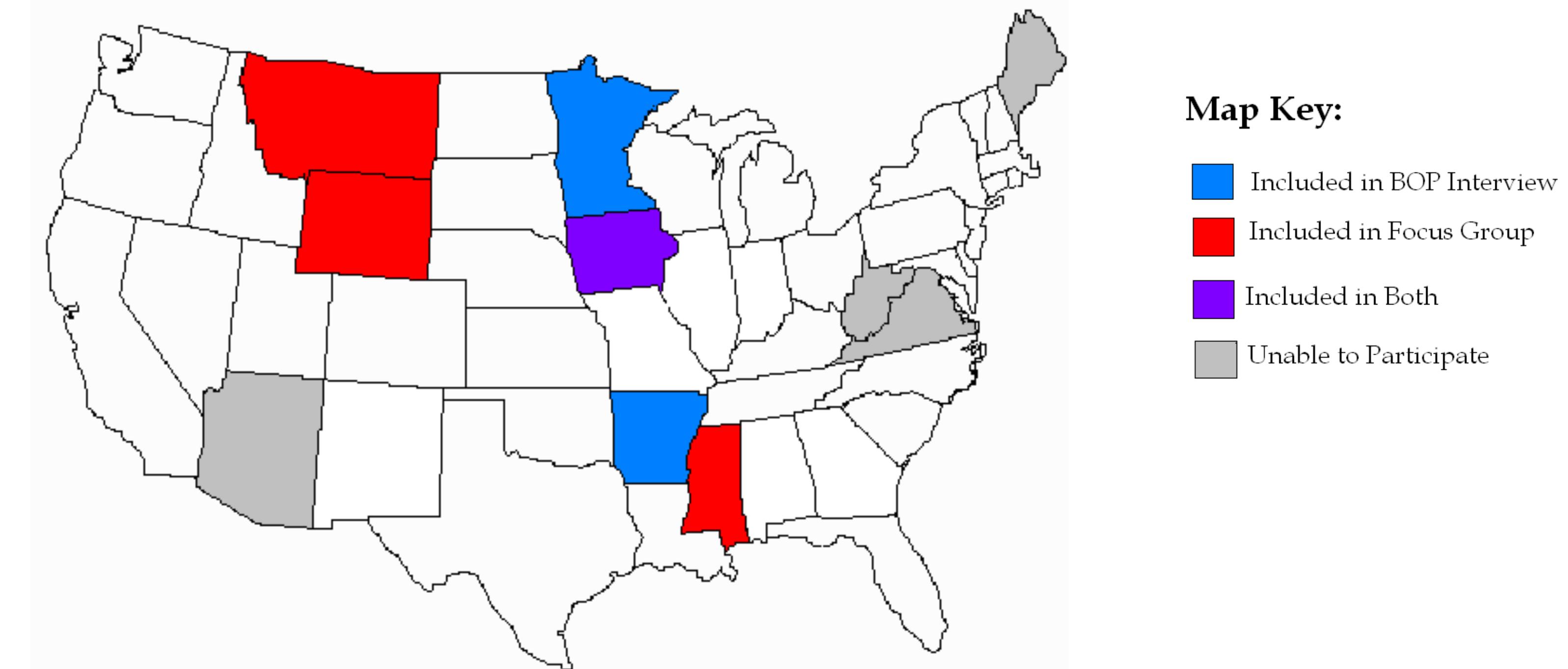
Methods

Telepharmacy issues were explored in 10 states through a combination of interviews with Board of Pharmacy administrators and a focus group of state pharmacy leaders familiar with telepharmacy programs within their respective states. The ten states were selected were a convenience sample and each had a high rural populations and represented diverse geography across the continental United States (Figure 1). The project was reviewed and deemed exempt by the University of Minnesota Institution Review Board.

Interviews were conducted with the State's Board of Pharmacy Executive Director or a Board Inspector in 4 states. The survey instrument was based on an instrument developed by the Upper Midwest Rural Health Research Center (UMRHRC), and explored the state's policies regarding telepharmacy, actions taken by the Board with respect to telepharmacy, and any differences in how outpatient and inpatient approvals of telepharmacy services were granted.

In addition to Board of Pharmacy phone interviews, a focus group comprised of four College of Pharmacy faculty members familiar with telepharmacy practices within their respective states was conducted via conference call. The focus group discussion guide was developed via review of primary literature discussing telepharmacy combined with the personal experience of the authors in this area. Discussion guide themes addressed status of patient access to pharmacy services in the participant's state, utilization of telepharmacy in the state, current regulatory issues, and participant opinions regarding telepharmacy delivery models compared to traditional practice.

Figure 1: States Invited to Participate



Results

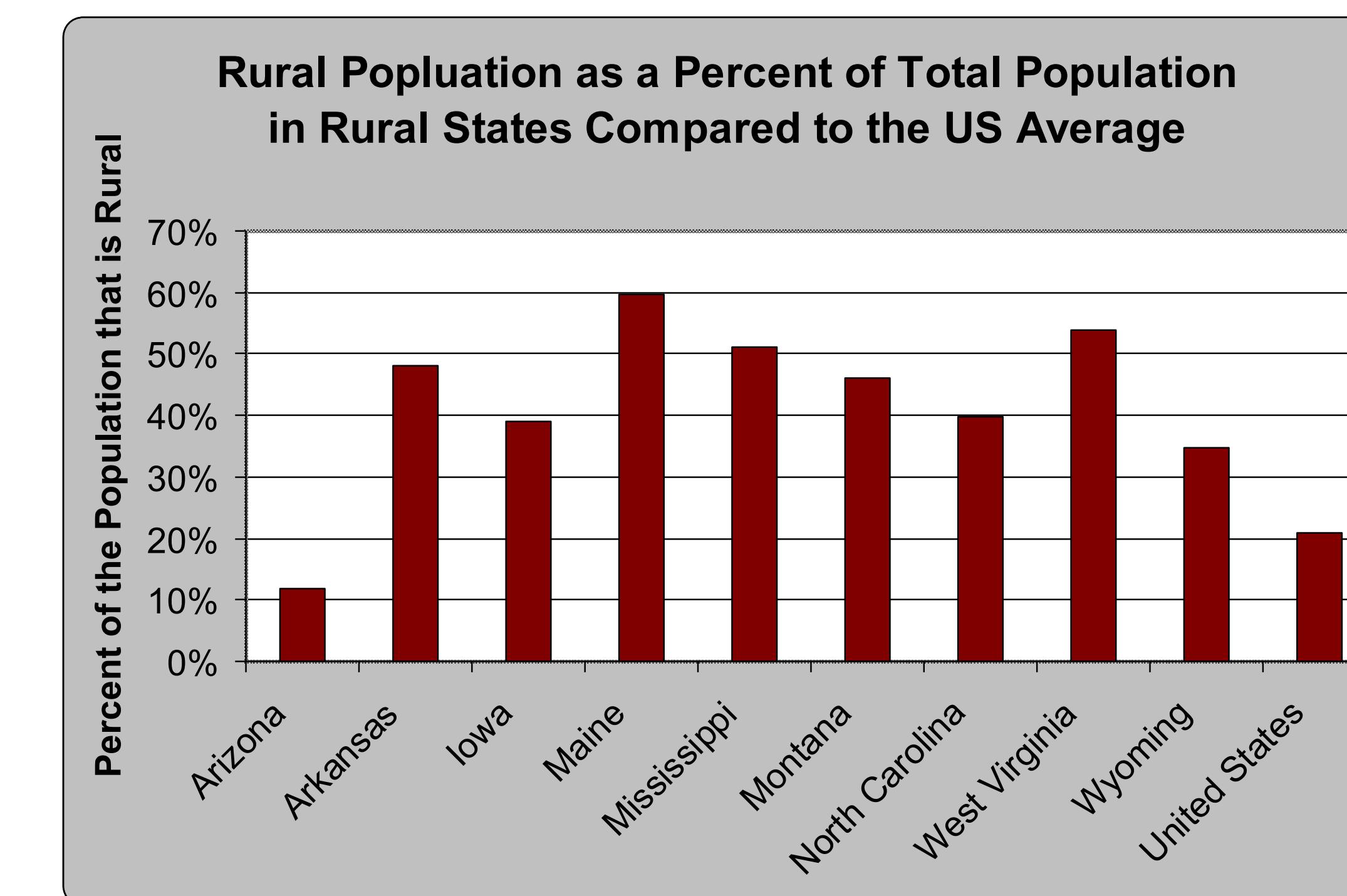
The Board of Pharmacy interviews revealed a few important themes:

- Many areas are working on their regulations at this time, and they typically involve wording similar to that originally developed by North Dakota.
- States with regulations have placed distance restrictions from the nearest established traditional retail pharmacy in order to limit direct competition. These distances vary from 15 to 25 miles. There was one state that did allow a variance for a practice eight miles from another "brick and mortar" pharmacy.
- One state has been issuing variances for their practices that are valid for one year. In this state, restrictions placed on telepharmacy application in institutional settings are more restrictive and the reason stated for this was that "they deal with more acute situations than community pharmacies."

The focus group had several themes were identified from the discussion.

- The group relayed concern expressed by pharmacists in their states that students are more and more reluctant to own and operate a community pharmacy after graduation. This combined with the increasing average age of rural community pharmacists creates significant concern regarding availability of pharmacists willing to live and work in rural communities.
- The group suggested that states that are more rural ($> 34\%$ of the population) are more frequently seeing pharmacies close and in certain instances, telepharmacy systems are filling the void.
- Overall, regulations for telepharmacy are likely most comprehensive in states with a higher 'frontier' population vs. states with many small communities located close together.
- The regulations in place (if they exist) often and most closely model North Dakota's practice guidelines.
- Respondents expressed mixed opinions regarding whether telepharmacy will prove to be beneficial and properly used alternative to delivering pharmacy services in rural communities.
- In places where the technology has been installed and used for telepharmacy, it is often taking "years" to see a return on investment. Initial cost is a significant barrier for some smaller operations.
- The application of telepharmacy to institutional settings was suggested as a superior alternative to the current situation in many small institutions where the lack of 24 hour pharmacy services results in nurse dispensing and retrospective order review.
- One participant indicated that their state has no regulations on telepharmacy and that the Board of Pharmacy has publicly expressed opposition to any delivery system that would be construed as "replacing a pharmacist."
- Having telepharmacy in a community that would otherwise have no access to a pharmacist is an advantage. The alternative is mail order for many patients in isolated areas, which was considered to be less able to meet patient needs.
- The group was mixed in their opinion regarding whether the adoption of telepharmacy services would affect pharmacists' motivations and decisions with respect to implementing medication therapy management services in their practices.
- The group also had varying opinions regarding whether the topic of telepharmacy is being addressed actively enough at the national level. Some believed that the individual states' situations are so unique that work telepharmacy issues should be addressed primarily at the state level. The forum appropriate for national level discussions was generally believed to be the National Association of Boards of Pharmacy.

Figure 2: TITLE



Discussion

Considering the responses from the interviews and focus group, there is apparent that little known about the impact telepharmacy will have on patient access to medications, medication use behaviors or the future of pharmacy practice. Despite this, the project suggests general agreement that telepharmacy can and will play an important role in the delivery of pharmacy services, particularly in rural areas.

Frequently regulations and practices currently being implemented suggest that regulators believe that traditional pharmacies need to be protected from competition from telepharmacy and that they are the preferred method of service delivery. In addition, it appears that the application of telepharmacy technology primarily focuses on order review and verification and patient counseling and has not been implemented in a manner that would expand the role of the pharmacist beyond these basic services.

Without further analysis, it remains unclear whether telepharmacy services delivered to a community will successfully meet the communities medication-related needs in the same manner in which locally provided services would or could. While Boards of pharmacy appear to be ensuring that application is safe within the context of order review and dispensing, it is less clear whether the full scope of services provided by a local pharmacist is being considered by Boards when telepharmacy operations are approved.

It has become clear after this project was completed that more information is needed and it is imperative for both pharmacy associations and Boards of Pharmacy need to take an active and engaged role in the implementation of this practice and become advocates for not only patient safety, but also the full scope of a patient's medication-related needs.

Limitations

A couple of major limitations of this study were the incomplete data retrieved from Boards of Pharmacy in select states, due to either the lack of official regulations for telepharmacy or a contact who was not familiar with the most current policies of the Board. In addition, the scope of this project did not include input from pharmacists actively operating telepharmacy programs, which may have affected the themes identified.

Conclusion

Telepharmacy is a growing service delivery mechanism in rural communities and its application and regulation varies significantly from state-to-state. Little is known definitively regarding the impact telepharmacy will have in meeting the medication-related needs of rural citizens and their communities.

Acknowledgements

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Sources:

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