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R SHEET ON

TELEMEDICINE IN EYE CARE: AN EMERGING TECH POLICY PRIMER

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BACKGROUND[1]

Patients are typically required to renew their prescriptions roughly every year before ordering new glasses or contacts. Traditionally, this required a physical office visit. However, recent Internet-enabled services are facilitating a new model wherein consumers can take an online vision test and have their prescription renewed in the comfort of their own home. If more serious eye maladies are detected by the computer program, they are referred to a licensed professional.

Online eye exams are one component of the developing field of telehealth, which promises to greatly reduce costs and expand access to healthcare. However, it often faces substantial regulatory barriers which slow or reduce the benefits available to consumers. This is particularly the case when it challenges the existing business model of incumbent industries.

The R Street Institute performs policy research on a variety of emerging technologies, including telemedicine but also in fields ranging from autonomous vehicles to artificial intelligence. This R Sheet is intended to provide vision care professionals, including ophthalmologists and optometrists, with general principles about how to approach emerging technologies, which can be applied to online eye care services.

SUMMARY

- Policymakers should resist "rent seeking" behavior that adversely affects emerging technology policy.
- A conflicting patchwork of state regulations will undermine the potential of emerging technologies like telemedicine.
- Outdated regulations need to be updated to accommodate innovative mobile health applications with low risk potential.
- Policymakers should not limit the deployment of telemedicine applications because of minor imperfections, particularly when such applications are as good as or better than alternatives.

ACTION ITEMS

"Rent seeking" behavior harms emerging technologies

No incumbent wants to face more competition, and apps that lower barriers to entry can have profound consequences on traditional, brick-and-mortar practices. If there are political means of blocking competition from innovative services, then it is only rational for incumbents to pursue such avenues. This is especially true when traditional business models have already invested in, for example, buildings and administrative staff—what in economic terms are called "sunk costs." Therefore, groups with sunk costs that could be stranded if their business model is replaced are particularly motivated to lobby for government-granted barriers to innovative entrants—a practice called "rent seeking."

Governments are often only too receptive to this kind of behavior, which can help incumbents protect their profits without innovating. For example, in 2016, Georgia passed a law outlawing the use of online applications to write prescriptions for corrective lenses. The end result of such rules is higher prices and lower-quality care for patients. But, since the costs are dispersed over a large number of patients while the benefits accrue to ophthalmologists and optometrists, rent seeking becomes rational. Policymakers should resist these calls for protectionism and, instead, foster an environment where technologies succeed or fail based on how well they serve patients.

Patchwork regulations undermine potential

The aforementioned example in Georgia highlights another challenge to smart telemedicine policy: Regulations come from many different jurisdictions that do not always comport with the characteristics of new technology. For example, there is currently a major divide between states that would allow online applications to be used to update vision prescriptions and those that would not. This results in uncertainty and undermines their potential.

One of the main benefits of telehealth applications more broadly is that they are not limited by geographic location. This feature means that individuals who may live in rural areas, far from a healthcare provider, can get access to quality

diagnostic and treatment tools and talk to doctors that may be across state lines. Decentralized points of regulation make it more difficult for these benefits to spread across the country. Even if one state adopts an ideal set of telehealth laws and regulations, all fifty states must adopt the same framework for the benefits to reach all U.S. consumers.

Multistate compacts or, when necessary, national preemption of a patchwork of state regulations can help create a unified, predictable regulatory environment that will account for the unique qualities of telemedicine and allow its benefits to be realized by patients across the country.

Outdated regulations can be a barrier to innovation

Well-intentioned regulations of the past can frequently be a barrier to deploying innovative solutions of the future. For example, the Food and Drug Administration (FDA) has established a fairly wide interpretation of "medical devices" that has swept many telehealth applications into a more stringent regulatory category than is necessary. The FDA's original intent was to prevent tools that pose a substantial danger from getting into the hands of unsuspecting consumers. Such concerns are less pertinent to applications like Internet-based vision tests, where the potential for consumer injury is low. Therefore, applying a sweeping regulatory apparatus over the industry is likely a major and unnecessary barrier to deployment.

The FDA is in the process of reconsidering how broadly to apply their "medical devices" regulatory authority and has begun outlining specific mobile health applications over which they will refrain from regulating in the traditional manner. There is good reason to extend this safe harbor to include online vision tests, which can provide significant economic gains to consumers at very little risk.

Demand for perfection limits current benefits of adoption

The quality of medical services provided by telemedicine is an obvious concern. But policymakers should bear in mind the relevant alternatives when regulating the quality of services. If someone lives in a remote area or is disabled, he or she may find it substantially more difficult to visit an ophthalmologist or optometrist of any quality. For such a person, an online application that even approaches the quality of in-person care is a marked improvement.

Policymakers should also account for the diverse character of different medical procedures. For example, the complexity and risk implicit in an eyesight test are generally far lower than that of performing remote surgery. The standards and expectations should, therefore, be flexible and adaptable to each case. Moreover, in various use cases, empirical studies of telemedicine have generally found them comparable to traditional medicine.

ENDNOTES

1. For further reading, see Charles Duan, Joe Kane and Caleb Watney, "Telemedicine: Lessons for–and from–emerging technology policy," R Street Policy Study No. 139, April 2018. http://bit.ly/telemed_Rstreet.

CONTACT US

For more information on this subject, contact the R Street Institute: 1212 New York Ave NW Suite 900, Washington D.C. 20005 | 202.525.5717 | feedback@rstreet.org

Joe Kane
Technology Policy Associate
jkane@rstreet.org
703.727.4864

Caleb Watney
Technology Policy Associate
cwatney@rstreet.org
202.900.8276
620.204.1127