

Understanding Rural-Urban Differences in Veterans' Internet Access Use, and Patient Preferences for Telemedicine

BACKGROUND

Telemedicine has expanded rapidly since the coronavirus pandemic. As a pioneer in video telemedicine, the Veterans Health Administration (VHA) quickly adapted to the limitation of in-person visits; nearly completely switching to telephone or VA Video Connect (VVC) visits.¹

As telemedicine expands, it is crucial to ensure rural Veterans are not left behind. The U.S. Department of Veterans Affairs (VA) must understand rural Veterans' preferences and ascertain actionable facilitators for telemedicine. Previous studies of telemedicine access and rural health care heavily relied on electronic health records^{1,2} or U.S. Census Bureau data. These studies have been successful in identifying large-scale differences in demographic groups but lack insight into personal factors influencing telemedicine use.

METHODOLOGY

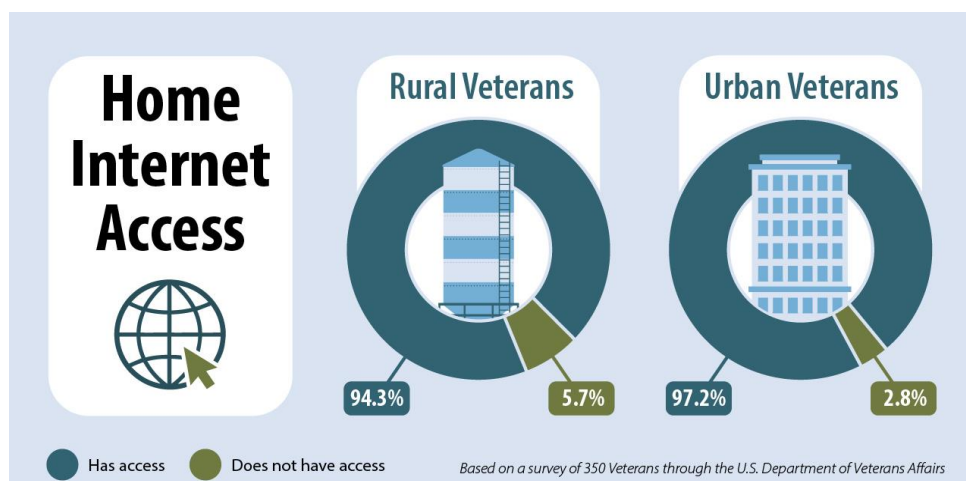
Eligible Veterans completed a 30-minute computer-assisted telephone interview. To be eligible, Veterans had an outpatient primary care visit at a VA facility in March 2022. The sampling design stratified Veterans by residential rurality (i.e., rural, or urban) and how primary care was delivered. Rurality was defined by Rural-Urban Commuting Area Codes and dichotomized as rural (i.e., highly rural, rural, or insular categories) or urban.³ Rural Veterans and video-based visits were oversampled. A total of 350 interviews were completed. Participants ranged in age from 23 to 91 years old (Mean=62, SD=14 years).

Sample weights accounted for stratification, oversampling, and nonresponse; results below represent unweighted frequencies and weighted percentage.

FINDINGS

Internet Access & Devices

- Among Veterans surveyed, 98% used a cell phone and 91% owned a computer at home.
- Most had access to broadband internet within their home (84%).
- Differences between rural and urban respondents were not significant.



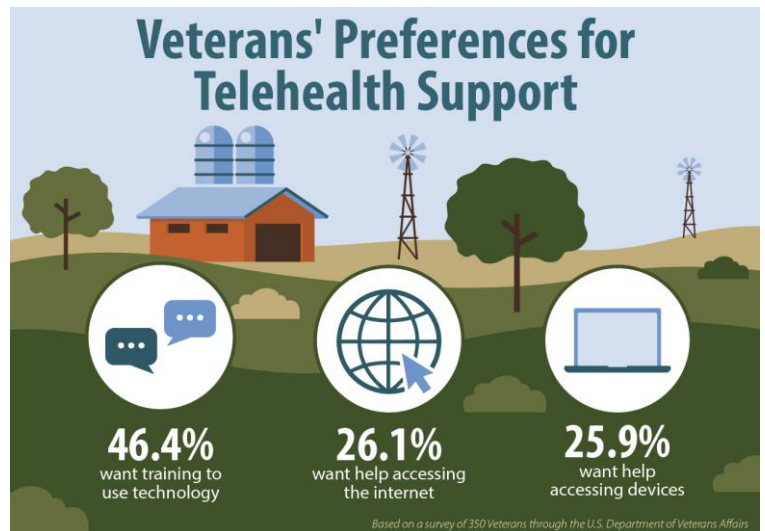
Telemedicine Experience

Telemedicine appointments are medical visits with a doctor that happen either by video or a telephone call. Rural Veterans compared to urban Veterans were:

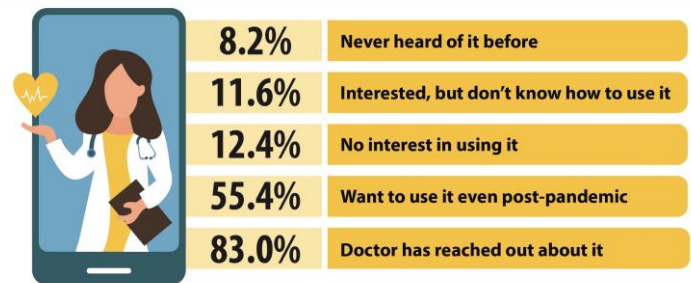
- less likely to have a telemedicine visit in the past year (74% vs. 85%; $p=0.02$).
- more likely to rate previous telemedicine visits not as good as an in-person visit (45% vs. 37%; $p=0.05$).
- and less likely to reach out to their provider via email (36% vs. 52%; $p<0$).

CONCLUSIONS

- Though rural Veterans were less likely to experience a telemedicine visit, the same actionable facilitators to improve telemedicine access were reported.
- Technology training was most often recommended.
- Policy makers, patient advocates, and other stakeholders should consider novel initiatives to provide training resources.



Veteran Telemedicine Interest & Usage



SUBJECT MATTER EXPERT

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FUNDING

Funding provided by the U.S. Department of Veterans Affairs (VA) Office of Rural Health.

Visit <http://www.ruralhealth.va.gov/> to learn more.

REFERENCES

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- ² Ye SK, Ian; Fleck, Elaine; Fleischut, Peter; Homma, Shunichi; Masini, David; Moise, Nathalie. Telemedicine Expansion During the COVID-19 Pandemic and the Potential for Technology-Driven Disparities. *Journal of General Internal Medicine*. 2020.
- ³ University of Washington Rural Health Research Center and USDA Economic Research Service (ERS). Rural-Urban Commuting Area Codes. <http://depts.washington.edu/uwruca/ruca-uses.php>. Accessed December 13, 2018.
- ⁴ O'Shea AMJ, Gibson M, Merchant J, Rewerts K, Miell K, Kaboli PJ, Shimada SL. Understanding rural-urban differences in veterans' internet access, use and patient preferences for telemedicine. *The Journal of Rural Health*. 2023; 1-8 doi: <https://doi.org/10.1111/jrh.12805>



U.S. Department of Veterans Affairs
Veterans Health Administration
Office of Rural Health

Revised November 2023