

Are State Telehealth Policies Associated With The Use of Telehealth Services Among Underserved Populations?

Jeongyoung Park, Clese Erikson, Xinxin Han, Preeti Iyer

Objective: To examine trends in telehealth usage over time, as well as the role state telehealth policies play in telehealth use when controlling for population characteristics.

Data: This study used a nationally representative biannual survey of consumers commissioned by the Association of American Medical Colleges from June 2013 to December 2016. To better represent the U.S. adult population, data were adjusted with post-stratification weights calculated by using the Current Population Survey. A total of 22,294 respondents during the period of 2013 and 2016 were analyzed in the study.

Methods: This study used a repeated cross-sectional time series design with a state fixed effects specification. We first conducted a trend analysis to examine overall telehealth utilization during the period of 2013 to 2016 by eight different modalities (such as appointment, test results, email, phone, video, live chat, mobile text, and mobile app). We then examined whether telehealth use varied by population characteristics and state telehealth policies using Chi-square tests. In doing so, we focused on live video communication, the most predominantly reimbursed form of telehealth modality. Multivariate logistic regression models were also constructed to examine whether favorable state telehealth policies were associated with higher rate of live video communication specifically among underserved populations.

Results: Telehealth use increased dramatically over the period of 2013-2016, with new modes such as live video, live chat, texting, and mobile apps gaining traction across all population groups. The rate of live video communication rose from 6.6% in June 2013 to 21.6% in December 2016. We found the use of live video communication was most dominant among: 1) working age and higher income populations, for whom it may be more difficult to take time off from work, and 2) Medicare beneficiaries under 65, who presumably have significant disabilities, and may, therefore, have more difficulty leaving the home because of physical limitations, which is consistent with prior studies. The use of telehealth was less prevalent among Medicaid beneficiaries, low income, and rural populations when compared to the rest of the study population. Surprisingly, favorable state telehealth policies, such as parity of coverage, were not statistically significantly associated with increased usage after controlling for population characteristics

Conclusions: This study suggests telehealth uptake is increasing, particularly the use of live video communication among higher income groups that are of working age and may lack time to visit physicians, and among younger Medicare beneficiaries with disabilities, who may be home bound. Poor and rural populations' uptake has been slower. Our finding that state efforts alone to remove barriers to using telehealth may not be sufficient for increasing telehealth use among underserved populations. It may suggest that new incentives for providers and consumers to adopt and use telehealth may be needed.

Key Words: state telehealth policies; underserved population; access to care