

# Disparities in Access to and Use of Telehealth

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California Health Benefits Review Program (CHBRP)  
University of California

## The Disparities in Health Policy Series

CHBRP's explainer series, Disparities in Health Policy, examines barriers to healthcare access in California and how these barriers affect different populations. Disparities are defined as "a particular type of health difference that is closely linked with economic, social, or environmental disadvantage" (Braveman, 2014). This series aims to illuminate underlying systemic challenges while providing a clearer understanding of potential policy approaches to address them. Consistent with CHBRP's commitment to objective, evidence-based analysis, each explainer is grounded in data and empirical research. Together, these explainers seek to inform policymakers and the public about how health policies can have different impacts across communities. See the complete series at [www.chbrp.org](http://www.chbrp.org).

## Telehealth in California

The use of telehealth expanded rapidly during the COVID-19 pandemic, driven by urgent public health needs and temporary policy flexibilities. Once rare, telehealth accounted for over 32% of outpatient visits by April 2020. Utilization has since declined but remains well above pre-pandemic levels, making up roughly 17% of outpatient evaluation and management visits (Edmiston & AlZuBi, 2022). Telehealth continues to play a major role in California's care delivery landscape, accounting for approximately 25% of primary care and 50% of behavioral health visits at federally qualified health centers between September 2022 and August 2024 (Uscher-Pines et al., 2024).

CHBRP has analyzed several bills related to the use and regulation of telehealth, including [Assembly Bill \(AB\) 32 \(2021\)](#), [AB 744 \(2019\)](#), [AB 2507 \(2015\)](#), [Senate Bill \(SB\) 289 \(2015\)](#), and [AB 1771 \(2013\)](#). A 2023 analysis of 190 articles, conducted by CHBRP in conjunction with the California Health Care Foundation (CHCF) found *strong evidence*<sup>1</sup> that live video visits can be clinically equivalent to in-person visits for a wide range of conditions, including behavioral health, dermatology, urology, and diabetes management (CHBRP & CHCF, 2023). Telephone-based care, while historically not reimbursed, became an essential modality during the pandemic, particularly for patients without video capabilities. Hybrid care, which blends in-person and remote services, has also proven effective for multiple conditions, including reproductive and behavioral health (CHBRP & CHCF, 2023).

However, the expansion of telehealth has also exacerbated existing disparities in access and use. Structural barriers such as lack of broadband, unaffordable devices, limited data plans, and low digital literacy disproportionately impact low-

<sup>1</sup> Strong evidence indicates that the majority of the studies reviewed are consistent in their findings that treatment is either effective or not effective. Conclusions could be altered with additional strong evidence.

income individuals, older adults, rural residents, and non-English speakers. Given sustained legislative interest in telehealth and its implications for access, cost, and equity, understanding existing disparities will be important to informing future state health policy.

## Disparities in Utilization

CHBRP has reviewed telehealth disparities in California in past bill analyses, notably the analysis of AB 32 (CHBRP, 2021). Presented are key findings from past analyses, updated with recent sources.

### Geography

**Key takeaway:** Rural Californians are as willing as urban residents to use telehealth but access it less due to structural and technological barriers, including limited broadband, fewer providers, and reduced device access.

Rural-urban disparities in health care access are well-documented. Rural populations tend to be older, sicker, and have less access to insurance and healthcare infrastructure compared to urban populations (HRSA, 2018). Approximately 13% of Californians reside in rural areas (Stanford, 2021), where provider supply in two-thirds of rural counties falls below levels considered sufficient to meet demand (Coffman et al., 2018). Travel distances, transportation limitations, and lower provider-to-population ratios present well-documented barriers to care, including for telehealth delivery (Marcin et al., 2016; Weinhold & Gurtner, 2014). For example, in 2021, fixed broadband was available to 99% of urban residents but only 83% in rural areas and 79% in tribal communities (Edmiston & AlZuBi, 2022).

Pre-pandemic and early-pandemic studies found lower rates of telehealth use among rural residents nationally (CHBRP, 2019; Day & Zweig, 2018; Jaffe et al., 2020; Nelson et al., 2019; Patel et al., 2021a; Pierce & Stevermer, 2020). In addition, among rural residents, telehealth use varied by health status. In one California survey, rural individuals reporting better self-rated health were more likely to report prior telehealth use, while those in poorer health were less likely to have used such services, despite likely greater clinical need (Lee et al., 2019).

More recent research has further examined this disparity. Larson et al. (2022) analyzed electronic health records from over one million patients in California safety-net clinics and found that rural patients had significantly lower odds of using telemedicine than urban patients during the pandemic. This difference persisted after adjusting for patient and clinic characteristics, suggesting structural barriers. These trends have persisted after the pandemic and into more recent data as well. In the first three months of 2025, about 15% of patients in urban areas used telehealth, while less than 8% of patients in rural areas had a telehealth claim (FAIR Health, 2025).

Survey-based studies by Ko et al. (2023) and Nadaud et al. (2025) found similar willingness to use telehealth across rural and urban respondents, but greater technological and infrastructural barriers in rural areas. In Ko et al., 78.4% of adults living in rural areas reported being willing to use telehealth, with no statistically significant differences observed by geography (adjusted prevalence ratio [aPR] = 0.99; 95% CI: 0.92-1.08). However, disparities in reported access to telehealth services remained significant. Rural adults were less likely to report access to telehealth than non-rural adults (38.6% vs. 44.9%), a difference that persisted after adjustment (aPR = 0.89; 95% CI: 0.79-0.99).

These findings are consistent with Nadaud et al. (2025), who conducted a survey of patients in urology clinics between November 2023 and March 2024. Patients from non-metropolitan clinics were more likely to report lower income, lower educational attainment, and less private insurance coverage than patients from metropolitan clinics ( $p < 0.05$ ). They were also significantly less likely to report access to smartphones, reliable cell service, computers with web cameras, or personal Wi-Fi. Despite these disparities, no differences were observed in willingness to have a telemedicine visit between metropolitan and non-metropolitan patients. Together, these studies suggested that structural and technological barriers, rather than attitudinal factors, continue to constrain telehealth access among rural populations.

## Language

**Key takeaway:** Adults with limited English proficiency face barriers to telehealth use in California, including inadequate interpreter integration, limited digital access and literacy, and inaccessible platform design, with disparities varying by preferred language.

CHBRP's prior analysis found that adults with limited English proficiency (LEP) were less likely to access or utilize telehealth services (CHBRP, 2021). Studies showed that non-English speakers faced lower rates of internet connectivity and device access, both nationally and in California. For example, a 2020 survey of low-income Californians found that only 57% of Spanish-dominant speakers had reliable internet access, compared to 86% of English-dominant speakers (CHCF, 2020b). Other studies conducted during the COVID-19 pandemic similarly found that non-English speakers were less likely to use telehealth (Blundell et al., 2020; Eberly et al., 2020; Schifeling et al., 2020).

More recent analyses continue to document persistent disparities in telehealth use among LEP populations in California. Pre-pandemic, Rodriguez et al. (2021) found that LEP patients in California had approximately half the odds of using telehealth, including telephone and video modalities, compared to English-proficient patients. Using 2021 data from the California Health Interview Survey, Rodriguez et al. (2024) found that LEP patients were significantly less likely to use telehealth and more likely to report negative experiences with video visits, even after adjusting for sociodemographic and access-related factors. Reported barriers included difficulty integrating interpreter services, lack of translated digital tools, limited digital literacy, and discomfort with remote communication and self-evaluation.

Disparities differ by preferred language as well. Hsueh et al. (2023) reported that compared to Spanish-speaking LEP patients, video visits were significantly more common amongst Cantonese (OR = 1.34, 95% CI: 1.18-1.52) or Mandarin (OR = 1.33, 95% CI: 1.16-1.52) speakers in a Northern California health system, and that language concordance with providers did not fully eliminate disparities<sup>2</sup>. Similarly, Shih et al. (2025) found that Chinese-speaking patients were most likely to use telemedicine in safety-net systems that offered telephone-based visits (OR 2.52, 95% CI 1.85-3.42 vs English-speaking patients), and that disparities between LEP populations widened in systems that emphasized video-first models.

Reflecting these findings, Sharma et al. (2023) found that although telehealth use increased overall during the pandemic, LEP patients, especially those speaking less-represented languages, remained underserved due to suboptimal telemedicine platforms, lack of integrated interpreter services, and low digital and health literacy. A national scoping review by Higashi et al. (2025) confirmed the persistence of these barriers for Spanish-speaking patients, while also identifying promising strategies, such as culturally tailored outreach, use of care partners, and interpreter integration, that can improve digital health engagement.

## Income

**Key takeaway:** Low-income Californians face barriers to video telehealth due to limited broadband, device access, and digital literacy, leading to greater reliance on audio-only visits, especially among Medi-Cal and uninsured patients.

CHBRP's prior review highlighted that low-income Californians were more likely to use telephone visits over video due to limited broadband, devices, and digital literacy (CHCF, 2020a; 2020b). A majority of low-income respondents (65%) reported using telehealth during the pandemic, comparable to the overall population (62%), but they relied more heavily on audio-only visits (43% vs. 38%) and were less likely to use video. Safety-net providers reported lower video use (47%) and 45% voiced concern about their patients' access to adequate technology (CHCF, 2020a).

<sup>2</sup> Adjusting for sociodemographic and technology access and familiarity factors and compared to patients speaking Spanish, video visit use was higher among patients speaking Cantonese (OR = 1.34, 95% CI: 1.18-1.52), Mandarin (OR = 1.33, 95% CI: 1.16-1.52), or Vietnamese (OR = 1.27, 95% CI: 1.09-1.47), but lower among patients speaking Punjabi (OR = 0.75, 95% CI: 0.75, 0.62-0.91).

Recent studies reinforce and expand on these findings. Broadband access remains a major structural barrier for both rural and low-income urban populations, with over one-quarter of U.S. households, particularly those earning under \$30,000, lacking home internet (Tilhou et al., 2024). In California, this digital divide continues to limit video telehealth use among low-income groups (Lau et al., 2022; Whaley et al., 2022). Patients in low-income zip codes are significantly more likely to complete telehealth visits by phone than by video, and safety-net providers still report lower rates of video delivery for Medi-Cal and uninsured populations (Pagán et al., 2022).

Recent survey data (Ko et al., 2023) found no statistically significant differences in telehealth willingness or self-reported access by income; the survey found that 79.0% of low-income adults reported being willing to use telehealth, with no statistically significant differences observed by income (aPR = 1.01; 95% CI: 0.91-1.13). However another study suggest that awareness, connectivity, and device availability, not motivation, are the key barriers. Adepoju et al. (2025) writes that federal programs like the Affordable Connectivity Program did not meaningfully close this gap, as digital literacy and technology access remaining uneven.<sup>3</sup> As a result, audio-only telehealth continues to serve as a vital access point for many low-income Californians, mirroring patterns seen in rural communities.

## Race and Ethnicity

**Key takeaway:** Racial and ethnic underrepresented groups in California face lower telehealth usage due to disparities in digital access, insurance coverage, and service modality design.

CHBRP’s earlier reviews highlighted persistent disparities in both health outcomes and digital access among Californians of color, contributing to inequities in telehealth use. More recent California-based studies reflect these patterns.

As of 2021, 35% of Hispanic adults, 29% of Black adults, and 36% of seniors lacked home broadband access (Edmiston & AlZubi, 2022).

A 2023 study of Los Angeles County primary care sites found that, after the COVID-19 stay-at-home order, Latino and Asian patients with chronic conditions had a lower probability of telehealth use compared to White patients, even after adjusting for age, sex, and insurance. Uninsured patients and those with Medicaid or Medicare were also less likely to use telehealth than those with private insurance, highlighting the intersection of coverage and race/ethnicity in access (Bustamante et al., 2023).

Similarly, studies of California’s federally qualified health centers found continued lower telehealth use among Black, Asian, and Hispanic patients compared to White patients, though distance from clinic increased telehealth uptake for all groups (Adepoju et al., 2025).

In San Francisco, patients from racial/ethnic minority groups had lower telemedicine use in video-focused systems; however, safety net systems prioritizing audio visits saw higher uptake among Chinese-speaking patients, suggesting that modality design can affect equity (Shih et al., 2025).<sup>4</sup>

Statewide insurance data show that integrated delivery healthcare systems, such as Kaiser Permanente, may reduce disparities in telehealth access among low-income and non-English-speaking populations (Whaley et al., 2022).

<sup>3</sup> The Affordable Connectivity Program was a federal program that offered eligible households a discount on their monthly internet bill and a one-time discount off the purchase of a computer or tablet. The program was a \$14.2 billion investment that was launched in December 2021 and ended on May 31, 2024 (FCC, 2024).

<sup>4</sup> Non-Hispanic Asian, non-Hispanic Black or African American, and Hispanic or Latin patients had lower odds of using telemedicine than non-Hispanic White patients (aOR 0.67, 95% CI 0.56-0.79; aOR 0.83, 95% CI 0.68-1.00; aOR 0.76, 95% CI 0.61-0.95, respectively).

## Age

**Key takeaway:** Older adults remain less likely than younger populations to use telehealth, particularly video visits, and more likely to rely on audio-only services. This pattern persisted and, in some cases, widened during the COVID-19 pandemic.

CHBRP's prior analyses have shown disparities in telehealth use by age remained during the COVID-19 pandemic (CHBRP, 2021). Studies examining telehealth utilization during the COVID-19 pandemic consistently found that older Americans were less likely to use telehealth services as compared to younger populations (Darrat et al., 2021; Eberly et al., 2020; Patel et al., 2021b). When older people reported using telehealth, they were more likely to use a telephone (audio-only) visit than a live video visit (Wegermann et al., 2021).

More recent studies continue to document disparities in utilization. A large analysis of California Public Employees' Retirement System data found that while telehealth use increased across all groups, older adults were significantly less likely to use video-based telehealth and more likely to rely on audio-only visits (Osmanlliu et al., 2023). FAIR Health's telehealth tracking data from the first three months of 2025 found that less than 10% of patients with a telehealth claim nationally fell into the 65+ age group (FAIR Health, 2025).

This pattern is consistent with national data showing that older adults were less likely to use digital health technologies for activities such as accessing test results or making appointments, and that these disparities widened during the pandemic despite overall increases in telehealth use (Qiu et al., 2024; Li et al., 2023).

## Sex and Gender

**Key takeaway:** Females and sexual minority adults have higher odds of telehealth use than males and heterosexual adults, respectively.

Several large national studies find females are more likely to use telehealth than males, even after adjusting for sociodemographic and clinical factors; Spaulding et al. (2024) reported an adjusted prevalence ratio (aPR) of 1.21 (95% CI: 1.06-1.38), and Khatana et al. (2022) found an odds ratio (OR) of 1.24 (95% CI: 1.22-1.27;  $p < 0.001$ ). Williams and Shang (2023) also observed this trend among low-income groups, reporting males being 12% less likely to use telehealth (OR: 0.875, 95% CI: 0.867-0.883;  $p < 0.001$ ). California-specific data around gender and telehealth remain limited, though Whaley et al. (2022) did not find gender to be a major driver of telehealth use when compared to other demographic features.

Emerging research since CHBRP's 2021 analysis also studies disparities by sexual orientation. Recent national studies find sexual minority adults have higher odds of telehealth use than heterosexual adults, even after adjusting for covariates (Atkinson et al., 2024; Wakeman et al., 2025). Specifically, sexual minority individuals are more likely to use telehealth for mental health services and cite convenience and reduced risk of illness as key motivations (Atkinson et al., 2024).

## Addressing Barriers and Disparities

The Bailey et al. (2021) Patient-Centered Outcomes Research Institute (PCORI) scoping review identified several key strategies for addressing barriers and disparities in telehealth utilization among populations at risk for health inequities. The most effective interventions were those that employed patient-centered and culturally tailored telehealth solutions, with active involvement of patients in the design and implementation process to ensure that telehealth platforms meet the specific needs of diverse communities. This approach was found to be critical for overcoming barriers related to age, language, health literacy, and cultural acceptability.

The review also highlighted the importance of delivering telehealth through trusted intermediaries, such as community health workers or local organizations, which can help build trust and facilitate adoption among groups historically experiencing disparities, including older adults and racial/ethnic minorities. Additionally, partnering with payers to expand telehealth reimbursement and ensuring confidential, patient-guided sharing of health information were identified as essential facilitators for equitable telehealth access.

External policy recommendations from CHCF offer additional guidance for state policymakers (CHCF, 2025). CHCF recommends investing in digital infrastructure, such as broadband expansion and device access, particularly in underserved and rural communities. It also emphasizes the importance of supporting digital literacy training, funding culturally and linguistically appropriate outreach, and ensuring that telehealth platforms are accessible to individuals with disabilities. Furthermore, CHCF advocates for sustained payment parity and the inclusion of equity metrics in telehealth policy evaluation to ensure long-term, inclusive access.

## Conclusion

Telehealth has become a significant component of California's health care delivery system, with the potential to mitigate access barriers related to geography, provider availability, and transportation. Evidence supports its clinical effectiveness across a range of conditions, and utilization remains well above pre-pandemic levels. However, use of telehealth varies across the population, with persistent disparities by geography, income, language, and other sociodemographic factors. Policy recommendations from organizations such as CHCF offer additional direction on strategies to support equitable telehealth access through state-level investment, evaluation, and implementation. As the California Legislature considers health insurance-related legislation, telehealth will continue to be an important factor with regard to access to care. However, policymakers and stakeholders should consider how existing disparities in access to and use of telehealth may limit the impacts of proposed legislation.

# About the California Health Benefits Review Program (CHBRP)

Drawing on the experience and assistance of multi-disciplinary faculty, researchers, and analysts based at the University of California, CHBRP provides the California Legislature with timely, independent, and rigorous evidence-based analyses of introduced health insurance benefits-related legislation. Most frequently, CHBRP analyzes proposed health insurance benefit mandates (e.g., mandates to cover a test, treatment, or service, such as continuous glucose monitors). For more about CHBRP’s 60-day analysis process, see the resource [Academic Rigor on a Legislature’s Timeline](#).

To read any of the 200+ bill analyses CHBRP has completed, see the [Completed Analysis](#) page on [CHBRP’s website](#). In addition to analysis of introduced legislation, CHBRP produces [other publications](#) including several annually updated resources, as well as issue briefs and explainers.

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