OFFICE of the INSURANCE COMMISSIONER
WASHINGTON STATE

Audio-only telemedicine

As directed by Section 8 of ESHB 1196 (2021)
Nov. 15, 2023

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www.insurance.wa.gov

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Executive summary

Audio-visual and audio-only telemedicine services provide consumers with an alternative to in-person visits with their health care providers. The COVID-19 pandemic vividly illustrated the need for, and value of, consumers having access to care via telemedicine.

The Legislature enacted Engrossed Substitute House Bill (ESHB) 1196 in 2021 in the midst of the COVID-19 pandemic. The legislation expanded required coverage of telemedicine to include coverage of audio-only telemedicine services if defined conditions were met by the treating health care provider. Rather than expanding audio-only telemedicine coverage requirements on a temporary basis during the pandemic, audio-only telemedicine coverage requirements are permanent.

To inform future legislative deliberations related to audio-only telemedicine coverage, section 8 of ESHB 1196 directed the Office of the Insurance Commissioner (OIC), in collaboration with the Washington State Collaborative for the Advancement of Telemedicine (Collaborative) and the Health Care Authority (HCA) to undertake a study related to audio-only telemedicine and report findings and any recommendations to the Legislature by Nov. 15, 2023. The Collaborative was established to advise the Legislature on telemedicine policy in Substitute Senate Bill (SSB) 6519 (2016). It is hosted by the University of Washington.

Section 8 of ESHB 1196 provides as follows:

> *(1) The insurance commissioner, in collaboration with the Washington state telehealth collaborative and the health care authority, shall study and make recommendations regarding:*
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> *(a) Preliminary utilization trends for audio-only telemedicine;*
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> *(b) Qualitative data from health carriers, including medicaid managed care organizations, on the burden of compliance and enforcement requirements for audio-only telemedicine;*
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> *(c) Preliminary information regarding whether requiring reimbursement for audio-only telemedicine has affected the incidence of fraud;*
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> *(d) Proposed methods to measure the impact of audio-only telemedicine on access to health care services for historically underserved communities and geographic areas;*
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> *(e) An evaluation of the relative costs to providers and facilities of providing audio-only telemedicine services as compared to audio-video telemedicine services and in-person services; and*
>
> *(f) Any other issues the insurance commissioner deems appropriate.*
>
> *(2) The insurance commissioner must report his or her findings and recommendations to the appropriate committees of the legislature by November 15, 2023.*

(3) This section expires January 1, 2024.

OIC, the Collaborative and HCA considered how experience with coverage of this relatively new service could best be captured to respond to the study's directives. To this end, the OIC contracted with the Value & Systems Science Lab (VSSL). VSSL has deep expertise related to health policy and statistical analysis. They were asked to identify usage trends for audio-only medicine during 2022, conduct a survey of health insurance carriers and Medicaid managed care organizations, identify recent, reliable research related to audio-only telemedicine services, and provide recommendations as to how the impact of audio-only telemedicine on access to health care for historically underserved populations and geographic areas can be measured.

VSSL's work yielded the following findings, which are described in greater detail in the full report.

Use of audio-only telemedicine services

- Audio-only telemedicine usage remained stable overall in 2022 but varied by patient population: Usage varied by consumers' age, gender, payer type and urban/rural residence, with older, female, Medicaid-insured and urban-dwelling consumers exhibiting higher proportions of usage than might be expected based on their representation in the overall evaluation population.
- Audio-only telemedicine was used most commonly for mental health conditions.
- Over time, the amount of audio-only telemedicine delivered by physicians and advanced practice providers (e.g., advanced registered nurse practitioners) was surpassed by the amount delivered by other providers, such as master's level behavioral health providers.
- Audio-only telemedicine services were rarely delivered by telemedicine-only providers.
- Audio-only telemedicine usage varied geographically, with certain areas demonstrating low use compared to others. Several counties in the southeastern part of Washington state exhibited low levels of audio-only telemedicine. Higher use areas were more geographically dispersed across the state.

Survey of health carriers and Medicaid managed care organizations

A survey was conducted with 12 insurance carriers in Washington state to assess carrier perceptions and observations about several issues related to audio-only telemedicine. The survey findings are:

- Audio-only telemedicine was used across many different types of care.
- Due to multiple factors, monitoring for providers' compliance with audio-only telemedicine laws occurred infrequently.

- In most instances, carriers did not conduct fraud audits and generally perceived that audio-only telemedicine fraud occurred infrequently.
- Carriers perceived telemedicine-only and brick-and-mortar providers to differ in some aspects of audio-only telemedicine, but not others.
- Amid both challenges and opportunities, no carriers have incorporated audio-only telemedicine into value-based purchasing and care initiatives.

Review of audio-only telemedicine studies and reports

VSSL reviewed a total of 130 studies and reports. The findings of their review included:

- An association between audio-only telemedicine and improved access to care was documented. Expanded insurance coverage and reimbursement for audio-only telemedicine services contributed to increased health care access, especially among vulnerable patient populations.
- Multiple studies in a range of settings suggested an association between use of audio-only telemedicine and improved clinical outcomes.
- The association between audio-only telemedicine and cost savings differed from patient and payer perspectives. Relative to in-person visits, audio-only telemedicine was associated with patient cost savings, largely derived from lower travel expenses. However, there was mixed evidence on provider and payer cost savings.

Recommendations

The OIC shared VSSL's findings with members of the Collaborative for their review. The following recommendations reflect a consensus among OIC, HCA and the Collaborative.

1. Research suggests a positive relationship between access to audio-only telemedicine and health outcomes. However, many studies reviewed by VSSL were conducted prior to the pandemic, and the VSSL did not assess the quality of research/evidence due to the timing and funding constraints of the project. While not definitively shown through VSSL's analysis of Washington state All Payer Claims Database (APCD) claims, the literature review suggests that availability of audio-only telemedicine services disproportionately benefited underserved populations and people living in rural communities.

   In addition, Washington state is currently experiencing serious challenges related to accessing behavioral health services. There is a continued relatively high use of audio-only telemedicine for mental health disorder treatment, which points to the ongoing need for access to these services. The Legislature should sustain requirements for health carriers, state and school employee benefit programs (Public Employees Benefits Board (PEBB)/School Employees Benefits Board (SEBB)) and Medicaid managed care organizations to cover audio-only telemedicine services, while pursuing additional opportunities to gain more information about the cost, usage and impacts of audio-only telemedicine.

2. Additional research and evidence review is recommended to evaluate whether audio-only telemedicine services provide quality care as a stand-alone option, including in relation to audio-visual and in-person care delivery. While the VSSL literature review suggested a positive correlation between use of audio-only telemedicine and health outcomes, outstanding questions remain about the direct impacts of audio-only telemedicine on client care and the broader delivery system. Any analysis should take into consideration impacts on differing demographic groups and consider whether proliferating audio-only services impacts availability of and access to in-person services. A recent article in the *Health Affairs* journal notes the importance of consumers having a meaningful choice between receiving telehealth and in-person mental health services.

3. With respect to ongoing monitoring of potential fraud, waste or abuse of audio-only telemedicine, the Medicaid managed care organization (MCO)/carrier survey VSSL conducted suggests there could be more proactive inquiries into the appropriate use of audio-only telemedicine. Additionally, all organizations with oversight responsibility for telemedicine, including regulatory agencies, purchasers and payers, should stay abreast of any usage trends or concerns regarding the clinical impact of audio-only telemedicine.

   To provide additional information regarding oversight of audio-only medicine use, the Washington Medical Commission (WMC) researched four fiscal years of disciplinary actions. Of 412 total disciplinary actions, WMC found 13 total disciplinary actions that relate in some way to telemedicine. Of these, the presence of audio-only telemedicine was incidental to other conduct by the provider. Much of the online prescribing/telemedicine issues that occurred during that period involved COVID-19 and misinformation issues. The bulk of the violations involved not properly establishing a patient relationship, improper documentation of treatment and improper or lack of documented clinical decision making. Many of these practices, as they related to COVID-19 treatments, stemmed from out-of-state entities claiming treatments were outside the mainstream medical understanding of effective medicine.

   The WMC has not had substantial complaints involving telemedicine outside of those described above. The remainder of the disciplinary actions show telemedicine is tangential to the failure of health care providers to meet the applicable standard of care and are not typically the central issue.

4. Evaluate how audio-only telemedicine affects access to care among historically underserved communities and geographic areas. Despite some suggestive evidence that audio-only telemedicine can improve equity, formal evaluations as described in the section starting on page 25 of this report should be undertaken as a high priority. Three options are offered for guiding this evaluation. They incorporate quantitative and qualitative analyses and note the insights that each option could yield.

5. Evaluate how audio-only telemedicine affects provider and health care payer costs. The VSSL literature review underscores how audio-only telemedicine can save costs for patients. However, evidence was too limited to draw conclusions regarding hospital or payer costs, including the appropriateness of audio-only telemedicine payment parity, which should be the focus of future evaluations. Further evaluations of provider and payer costs could

determine, using the APCD and other sources, whether audio-only telemedicine visits substitute for in-person visits or are additive. Evaluations should consider the impact of telemedicine payment parity on access to care, as well as health care provider and facility revenues, including the ability of brick-and-mortar providers to sustain telemedicine in their practice, and its impact on state costs.

6. Evaluate the differences between telemedicine-only and brick-and-mortar providers. The carrier/Medicaid MCO survey showed that carriers and MCO's perceive certain differences between telemedicine-only and brick-and-mortar providers. Evaluation is needed to identify and quantify differences in the quality and cost.

7. Consider incorporating audio-only telemedicine into value-based purchasing and care. The carrier/Medicaid MCO survey results indicated that little work has occurred to date to integrate audio-only services into value-based purchasing and care. This is an opportunity that OIC, HCA and the Collaborative could explore further through evaluation or a dedicated working group.

Introduction and background

Audio-visual and audio-only telemedicine services provide consumers with an alternative to in-person visits with their health care providers. The COVID-19 pandemic vividly illustrated the need for, and value of, consumers having access to care via telemedicine.

The Washington state Legislature expanded access to telemedicine services incrementally over a six-year period, starting in 2015 with Substitute Senate Bill (SSB) 5175. The legislation required health insurance carriers, including health plans offered to state employees and Medicaid managed care plans, to reimburse a provider for a health care service delivered through telemedicine or store and forward technology if:

- The plan provides coverage of the health care service when provided in person.
- The health care service is medically necessary.
- The health care service is a service recognized as an essential health benefit under the Affordable Care Act.

In 2017, in SB 5436, the Legislature expanded the sites where telemedicine could be provided to include a patient's home or any location the patient chooses. In 2020, in ESSB 5385, the Legislature required health insurers, state employee health plans and Medicaid managed care plans to reimburse a provider for health care service provided through telemedicine at the same rate as health care services provided in-person – known more commonly as "telemedicine payment parity". The standard for telemedicine payment parity was clarified in 2021 legislation to require that health care providers are reimbursed the same for telemedicine services as they are for in-person services. Hospitals, hospital systems, telemedicine companies and provider groups of 11 or more providers can agree to reimbursement rates that differ from in-person services rates.

The Legislature enacted ESHB 1196 in 2021 in the midst of the COVID-19 pandemic. The legislation had several components related to audio-only telemedicine:

- Audio-only telemedicine is defined as delivering health care services using audio-only technology, allowing real-time communication between the patient and the provider for purposes of diagnosis, consultation or treatment. Audio-only telemedicine does not include fax, email or health care services that are normally delivered by audio-only technology and not billed as separate services by the provider.
- Health plans offered by health carriers, state and public school employee health plans, Medicaid managed care plans, and behavioral health administrative services organizations (for covered people under age 18) must reimburse providers for audio-only telemedicine services as they would for audio-video telemedicine.
- If a provider intends to bill a health insurer or patient for audio-only telemedicine, before delivering the service, they must first obtain the patient's consent to bill.

- The audio-only telemedicine reimbursement requirement applies only if the covered person has an "established relationship" with the provider. This means under current law, an established relationship exists if the provider providing audio-only telemedicine has access to sufficient health records to ensure safe, effective and appropriate care services, and:

    - For behavioral health services, the patient must've had within the past three years at least one in-person appointment, or at least one real-time interactive appointment using both audio and video technology with a provider, a provider within the same medical group, or a referring provider; and

    - For all other health care services the patient had, within the past two years, at least one in-person appointment, or, until July 1, 2024, at least one real time interactive appointment using both audio and video technology with a provider, a provider within the same medical group, or a referring provider.

Rather than expanding audio-only telemedicine coverage requirements on a temporary basis during the pandemic, the Legislature made audio-only telemedicine coverage requirements permanent. To inform future legislative deliberations related to audio-only telemedicine coverage, section 8 of ESHB 1196 directed the OIC, in collaboration with the Washington State Collaborative for the Advancement of Telemedicine (Collaborative) and the Health Care Authority (HCA) to undertake a study related to audio-only telemedicine and report findings and any recommendations to the Legislature by Nov. 15, 2023. The Collaborative was established to advise the Legislature on telemedicine policy in SSB 6519 (2016). It is hosted by the University of Washington.

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OIC, the Collaborative and HCA considered how experience with coverage of this relatively new service could best be captured to respond to the study's directives. To this end, OIC contracted with the Value & Systems Science Lab (VSSL) to conduct several activities and analyses:

1. Prepare a health claims data analysis report to identify preliminary usage trends for audio-only telemedicine.

2. Conduct a survey of health carriers and Medicaid managed care organizations in Washington state to gather information related to the burden of compliance and enforcement requirements for audio-only telemedicine and whether audio-only telemedicine has affected the incidence of fraud.

3. Conduct a literature review to identify recent, reliable research and evidence on regulatory experiences, costs and clinical effectiveness of audio-only telemedicine services.

4. Provide recommendations related to methods to measure the impact of audio-only telemedicine on access to health care for historically underserved populations and geographic areas.

As described in greater detail below, the APCD claims analysis, when paired with the findings of the literature review, point to the critical need to gain more information about usage and impacts of access to audio-only telemedicine services on people of color, indigenous people, other historically disadvantaged groups and people living in rural communities.

Telemedicine services usage

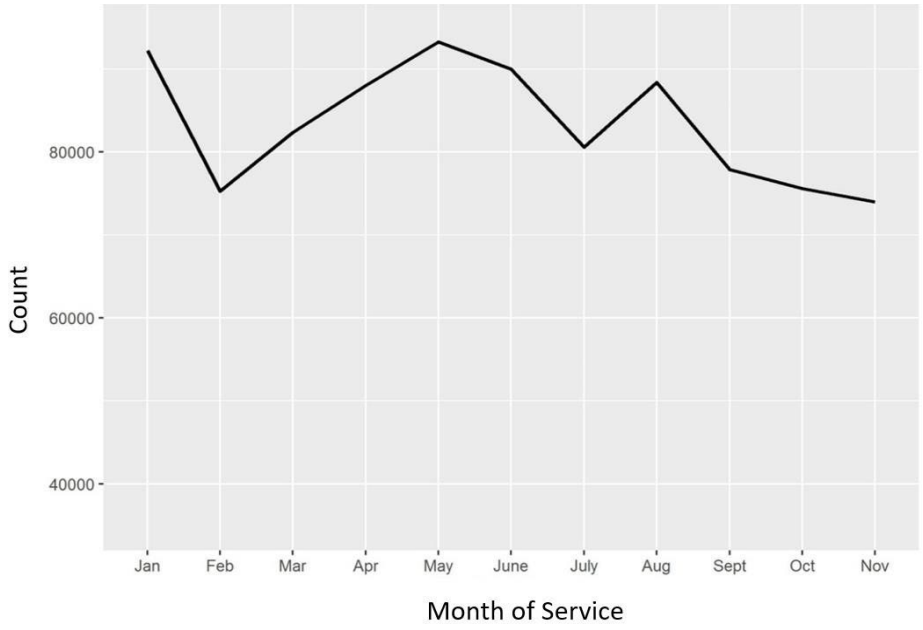
VSSL examined the usage of audio-only telemedicine services using claims data from the Washington All-Payer Claims Database. It analyzed claims during the period of Jan. 1 to Nov. 30, 2022. This time period was chosen to describe audio-only telemedicine services usage during a period least affected by the COVID-19 pandemic, as compared to earlier periods (2020 and 2021). In addition, several new audio-only telemedicine billing codes were implemented in 2022.

There were five notable findings of the analysis.

Finding 1: Audio-only telemedicine usage remained stable overall but varied by beneficiary population.

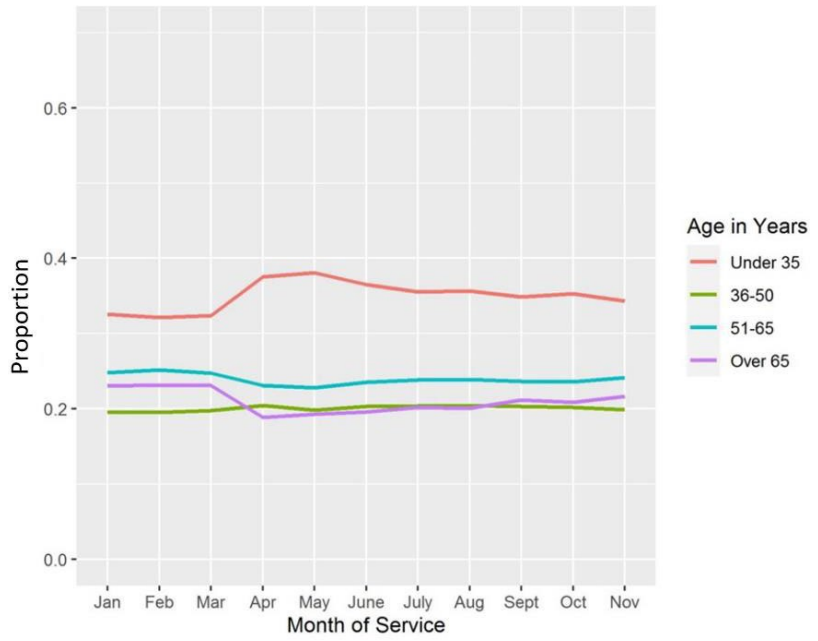
Audio-only telemedicine usage remained stable over the time period studied in 2022.

Audio-only telemedicine services over time (base case)

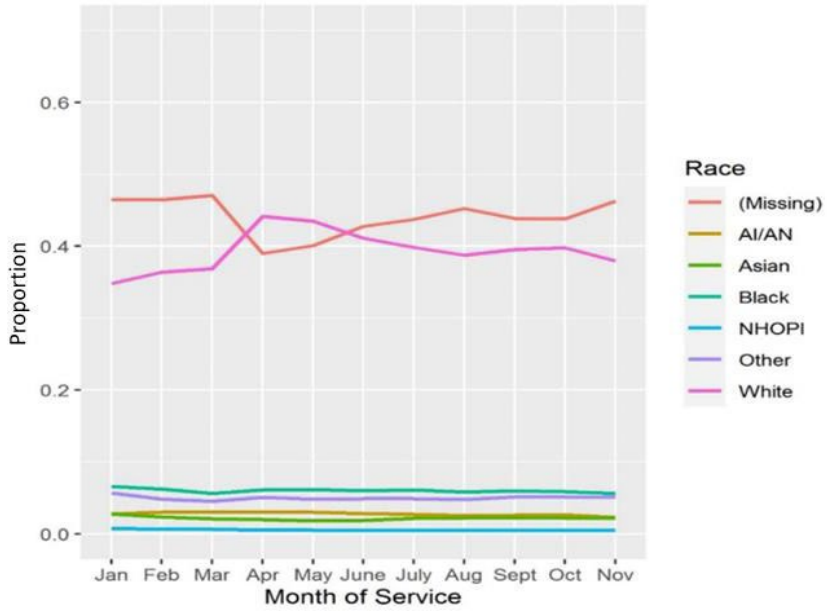


Usage varied by consumers' age, gender, payer type and urban/rural residence, with older, female, Medicaid-insured and urban-dwelling consumers showing higher usage than might be expected based on their representation in the overall evaluation population. Usage also varied slightly by the extent of social vulnerability in consumers' areas of residence.

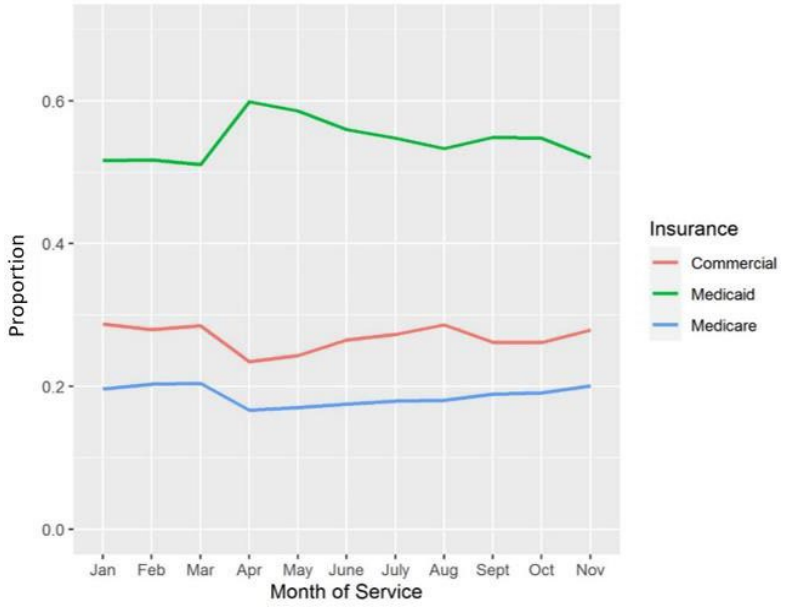
Audio-only telemedicine services over time (base case), <u>proportion by age</u>



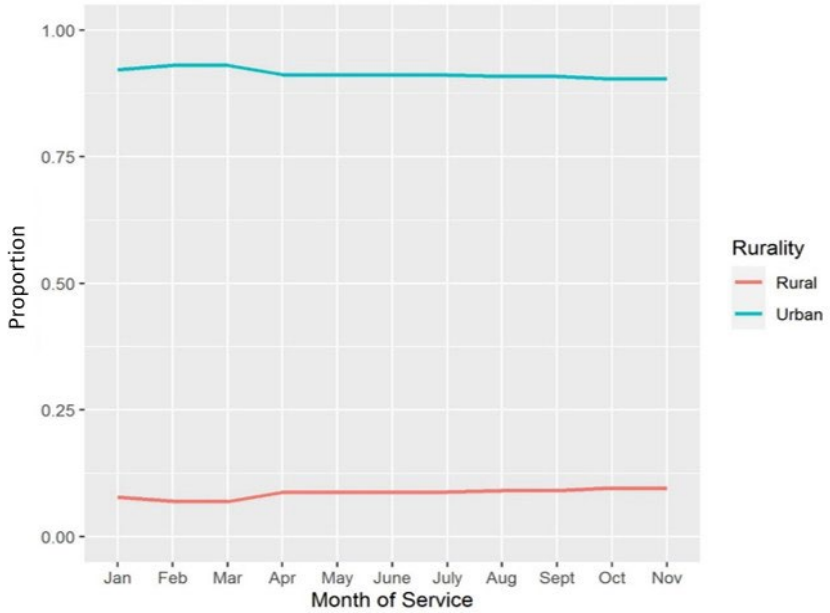
Audio-only telemedicine services over time (base case), <u>proportion by race</u>



Audio-only telemedicine services over time (base case), <u>proportion by payer</u>



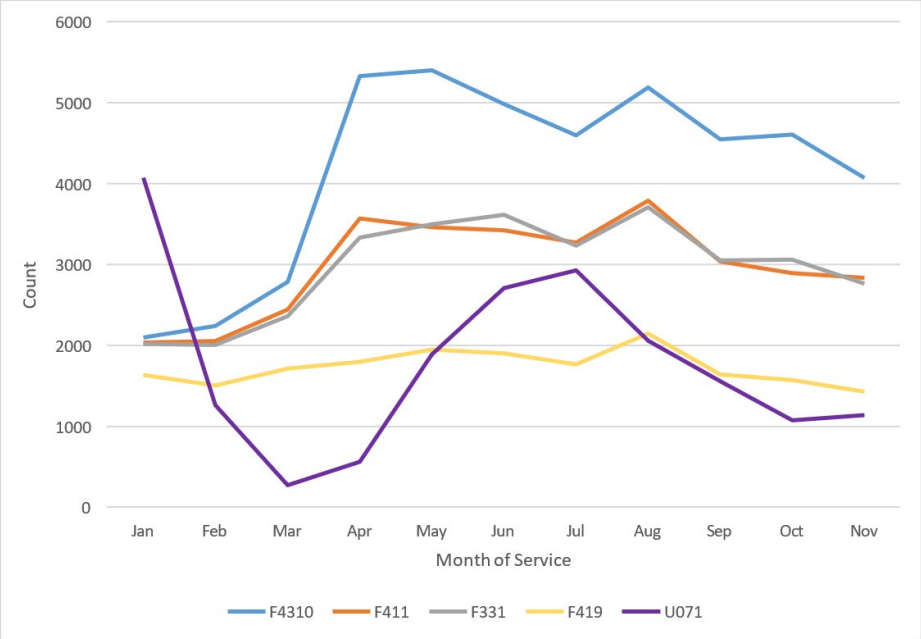
Audio-only telemedicine services over time (base case), <u>proportion by rurality</u>



Finding 2: Audio-only telemedicine was most commonly used for mental health conditions.

Conditions most commonly associated with audio-only telemedicine were post-traumatic stress disorder, generalized anxiety disorder, unspecified anxiety disorder and major depressive disorder. These findings may reflect the importance of audio-only services for behavioral health and/or the emergence of new claims-based methods to identify audio-only telemedicine use for behavioral health needs.

Audio-only telemedicine services over time (base case), count by top five most common conditions

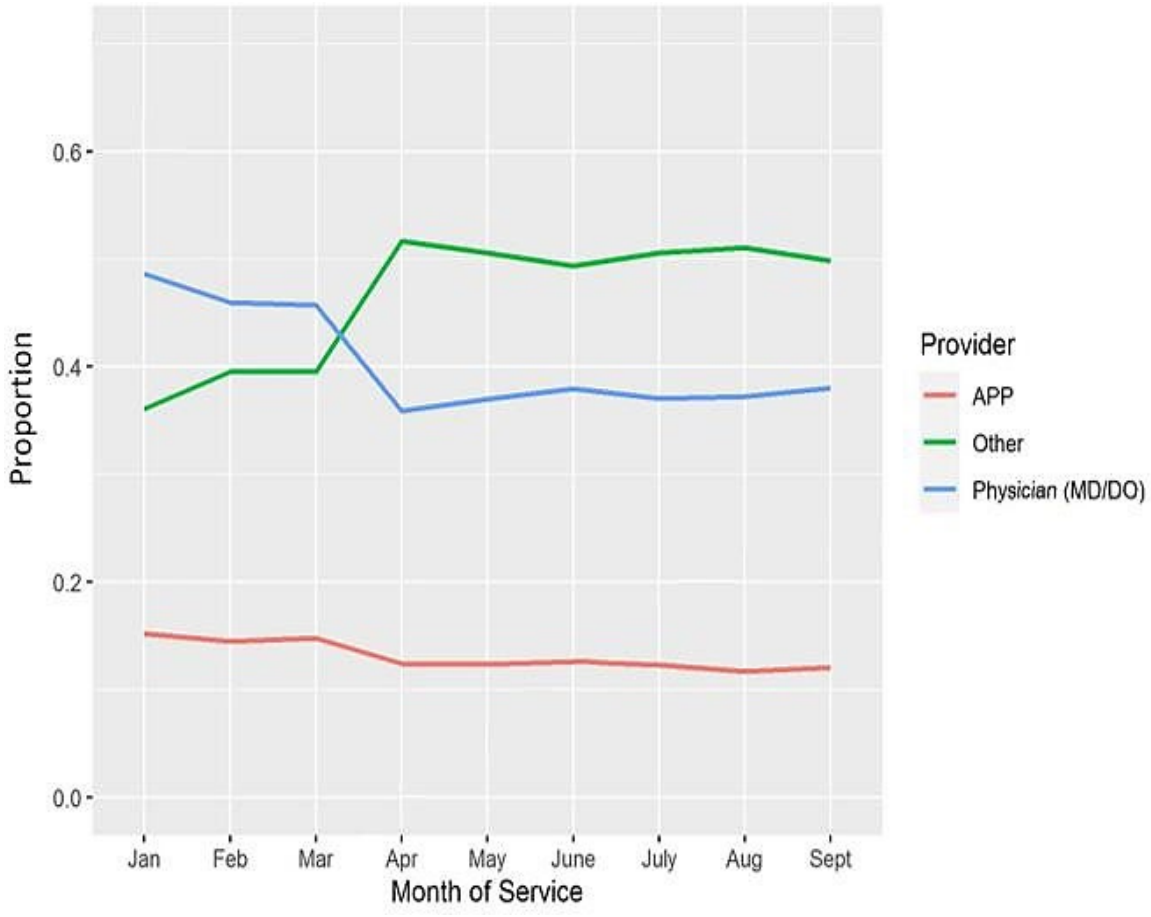


ICD-10	Condition
F4310	PTSD, unspecified
F411	Generalized anxiety disorder
F331	Major depressive disorder, recurrent, moderate
F419	Anxiety disorder, unspecified
U071	Asymptomatic individuals who test positive for COVID-19

Finding 3: Over time, the amount of audio-only telemedicine delivered by physicians and advanced practice providers was surpassed by the amount delivered by other providers.

Over the evaluation period, the amount of audio-only telemedicine delivered by providers, such as psychologists and licensed independent clinical social workers, exceeded the amount delivered by physicians and advanced practice providers (e.g., advanced registered nurse practitioner, physician assistant). Together with Finding 2 (audio-only telemedicine being commonly used for behavioral health conditions), this trend may have reflected a growing number of behavioral health providers delivering audio-only telemedicine.

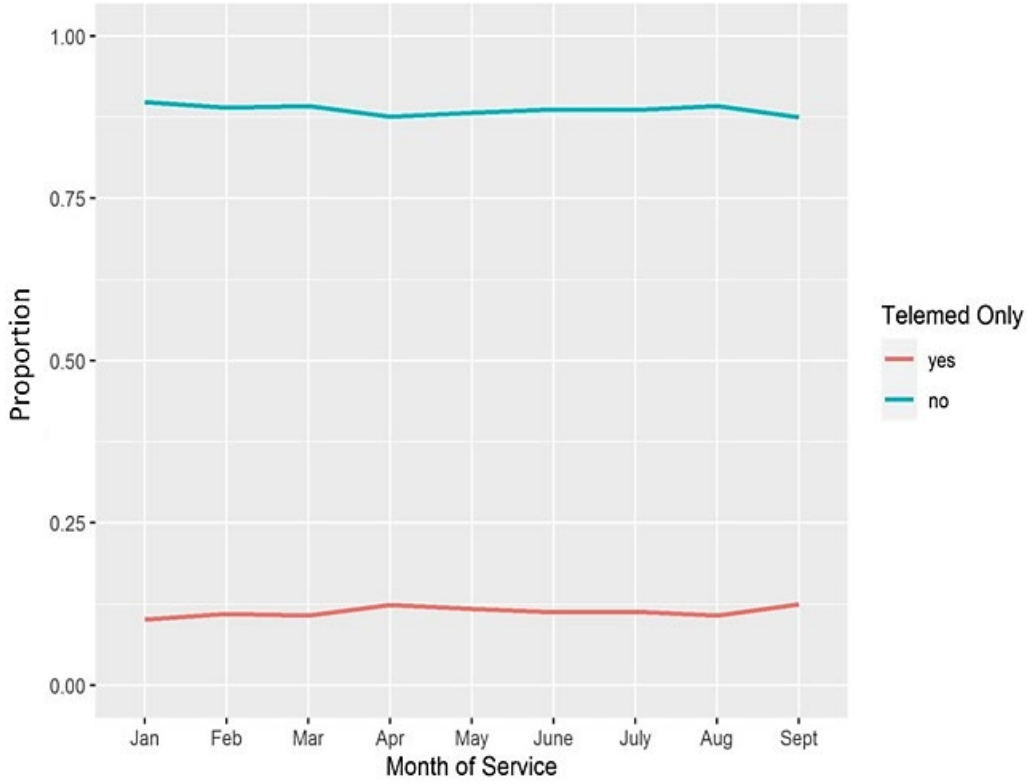
Audio-only telemedicine services over time (base case), proportion by provider type



Finding 4: Audio-only telemedicine was rarely delivered by telemedicine-only providers.

Telemedicine-only providers – those who deliver services exclusively through telemedicine – comprised a small percentage of all providers and provided a low proportion of audio-only telemedicine services.

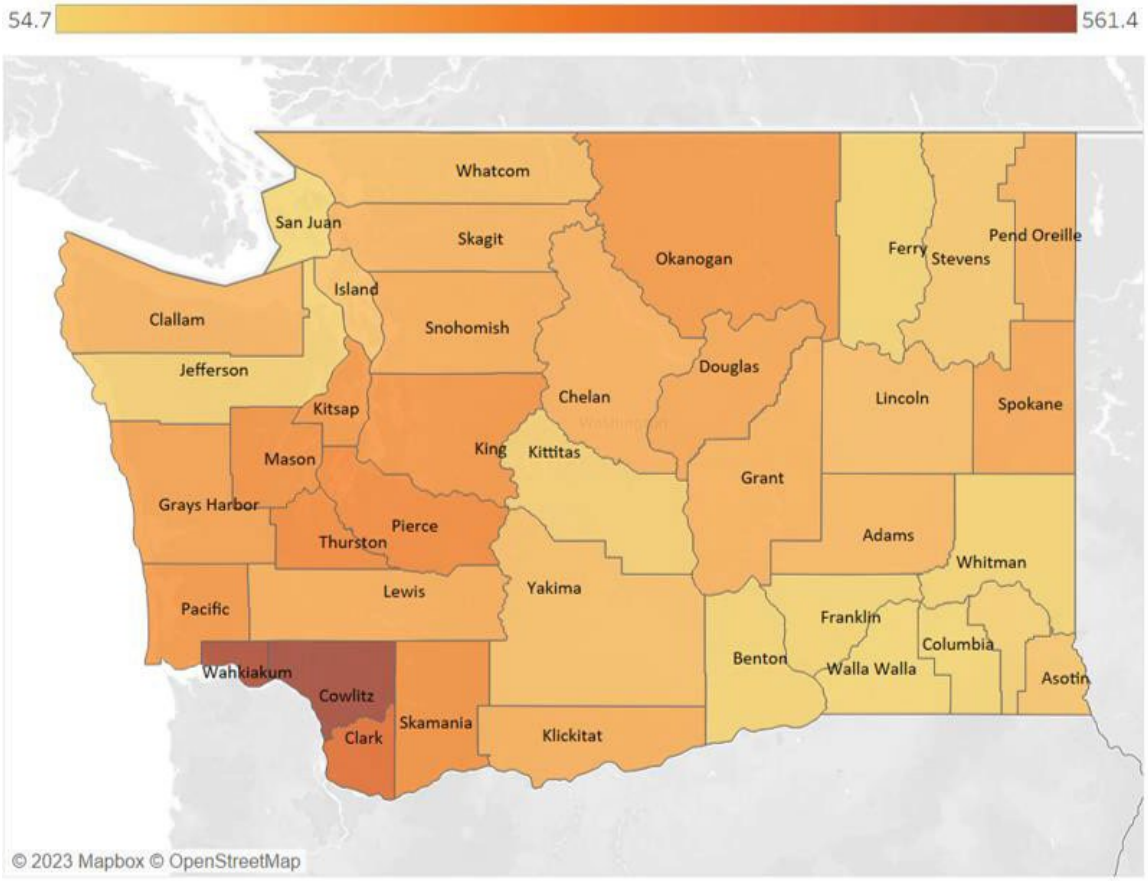
Audio-only telemedicine services over time (base case), proportion by telemedicine-only status



Finding 5: Audio-only telemedicine use varied geographically, with certain areas demonstrating low use compared to others.

Several counties in the southeastern part of Washington state exhibited low levels of audio-only telemedicine. Higher-use areas were more geographically dispersed across the state.

Audio-only telemedicine services per 1,000 beneficiaries (base case), by county



This analysis also included two alternative approaches to capturing audio-only telemedicine usage. These approaches were adopted to reflect other ways that audio-only telemedicine services could have been indicated in claims (as pandemic-related services; inadvertently as audio-video telemedicine services) and yielded several exploratory findings that are further detailed in Appendix A of this report.

Survey of health carriers and Medicaid managed care organizations

Twelve insurance carriers and Medicaid managed care organizations (MCO) in Washington state took a survey administered by VSSL to assess carrier perceptions and observations about a number of issues related to audio-only telemedicine. To be responsive to the direction from the Legislature, the survey included questions related to:

- Enforcement requirements and compliance burden:
  These questions addressed three components of current law: Required patient consent, established relationship and prohibiting facility fees when audio-only telemedicine services originate in a hospital.

- Observations about fraud incidence and audits:
  Questions addressed carriers' operational definition of fraud as it relates to audio-only telemedicine, monitoring for fraud and any differences in the incidence of fraud as between telemedicine-only and brick-and-mortar providers (i.e. providers who see patients both in-person and via telemedicine). Given that this survey was limited to carriers and Medicaid MCO's, the survey did not capture criminal or civil fraud referrals to the state Health Care Authority or the Attorney General's Medicaid fraud unit.

- Differences in audio-only telemedicine services between telemedicine-only and brick-and-mortar providers:
  Questions addressed contracting with telemedicine-only providers, impact of telemedicine-only providers on access to care and any perceived differences in the use or quality of services between telemedicine-only and brick-and-mortar providers.

- Impact of audio-only telemedicine on value-based purchasing arrangements or value-based care programs:
  Questions addressed use, opportunities and challenges related to integrating audio-only telemedicine into value-based purchasing arrangements.

VSSL shared a draft of the survey with carriers and Medicaid MCO's for review and feedback, with emphasis on the ability of the carriers and MCO's to answer questions with available information and data. Carriers had four weeks to submit any clarifying questions and feedback. Feedback was subsequently incorporated into a final draft. At a meeting of the Association of Washington Healthcare Plans on Jan. 25, 2023, VSSL presented the final survey version and provided opportunities for attendees to ask clarifying or logistical questions.

The survey was sent to and completed by 12 Medicaid MCO's and commercial carriers: Aetna, Amerigroup, Cigna, Community Health Plan of Washington, Coordinate Care, Kaiser Permanente,

Molina Healthcare, PacificSource Health Plans, Premera, Providence Health Plan, Regence and UnitedHealthCare.

The OIC emailed the survey to eligible carriers via a web link and PDF on Feb. 15, 2023. The survey took place over eight weeks and closed on April 14, 2023.

The survey had five notable findings:

Finding 1: Audio-only telemedicine was used across many different types of care.

Carriers reported that audio-only telemedicine was used for multiple types of care, including mental health and substance use disorder services, preventive and wellness services, chronic disease management, pediatric services (including oral and vision care), emergency services, and maternity and newborn care.

Finding 2: Due to multiple factors, monitoring for providers' compliance with audio-only telemedicine laws occurred infrequently.

Carriers perceived that providers were aware of audio-only telemedicine laws requiring patient consent prior to use (Patient Consent Law), requiring use between clinicians and patients with whom they had existing relationships (Established Relationship Law), and disallowing facility fees to be billed (Facility Fee Law). Due to a number of factors – including lack of automated systems, labor intensive process, and no explicit requirement to monitor for compliance – carriers very infrequently monitored providers for compliance with these laws.

Finding 3: In a number of instances, carriers did not conduct fraud audits and generally perceived that audio-only telemedicine fraud occurred infrequently.

For all three audio-only telemedicine laws (Patient Consent, Established Relationship, Facility Fee), half or more of the carriers did not perform fraud audits of providers. Among other carriers, perceptions were that fraud occurred rarely or never, though in some instances individual carriers perceived fraud as occurring sometimes or often. Of note, while carriers and Medicaid MCO's may have indicated that audio-only telemedicine fraud occurs infrequently, the Health Care Authority has experienced, given the recent increase in telehealth usage, a correlated increase in fraud referrals to the state.

Finding 4: Carriers perceived telemedicine-only and brick-and-mortar providers to differ in some aspects of audio-only telemedicine, but not others.

Carrier perceptions about fraud occurrence between brick-and-mortar and telemedicine-only providers were similar. In contrast, carriers perceived that compared to brick-and-mortar providers, telemedicine-only providers improved access to audio-only telemedicine services, but potentially at the risk of lower safety.

There were mixed perceptions about clinical effectiveness, equity, and patient costs between telemedicine-only and brick-and-mortar providers.

Finding 5: Amid both challenges and opportunities, carriers didn't incorporate audio-only telemedicine in value-based purchasing and care.

Carriers perceived both challenges and opportunities to integrating audio-only telemedicine into value-based purchasing arrangements or value-based care programs. At the time the survey was conducted, no carriers reported doing so.

The full survey and analysis appear in Appendix B of this report.

Literature review

To assess evidence about the use and impact of audio-only telemedicine, VSSL conducted:

1. A systematic review of peer-reviewed literature
2. Additional literature review
3. A cost review

Both components of the literature review focused on three domains related to audio-only telemedicine: *Regulatory experiences*, *costs* and *clinical effectiveness*.

Seventy studies met the VSSL criteria for the systemic review of peer-reviewed literature. VSSL reviewed an additional 60 studies produced by a variety of organizations, including major health care consulting and actuarial firms, health foundations and health policy organizations.

There are several factors to consider when interpreting the results of the literature review. First, most of the articles reported research that was conducted prior to COVID-19. There was not a robust body of research or evidence conducted after the onset of the pandemic related to audio-only telemedicine. Second, there was a wide variation in methods among the studies (e.g., populations studied, study design, analytic methods). Third, this literature review was intended to be a systematic review of the literature, rather than an in-depth assessment of the quality of the research studies and evidence. When taken together, these factors preclude definitive overarching conclusions about the effectiveness or impact of audio-only telemedicine on access to care and costs of care.

Nevertheless, the studies VSSL reviewed tended to suggest a positive association between audio-only telemedicine and improved access to care, clinical outcomes and patient cost savings. With respect to access, five articles reported certain populations – including racial and ethnic minorities, geographically remote communities, individuals who were uninsured, individuals who were non-English speaking or had limited English proficiency, individuals with limited digital literacy or transportation difficulties – were more likely than other groups to use audio-only telemedicine. Articles also noted how expanded insurance coverage and reimbursement of telemedicine contributed to improved health care access, especially among vulnerable patient populations.

With respect to outcomes, 49 articles – 45 reporting on work conducted prior to COVID-19 and four reporting on work done after the start of COVID-19 – assessed audio-only telemedicine and clinical outcomes for a broad range of behavioral and physical health conditions.

With regards to cost savings, three articles reported that relative to in-person visits, audio-only telemedicine was associated with patient cost savings largely derived from lower travel expenses.

Across seven articles, there was mixed evidence on provider and payer cost savings.

Finding 1: Association between audio-only telemedicine and improved access to care has been documented.

Certain populations were more likely than others to use audio-only services:

- Racial and ethnic minorities
- Geographically remote communities
- Individuals who were uninsured
- Individuals who were non-English speaking or had limited English proficiency
- Individuals with limited digital literacy or transportation difficulties

Expanded insurance coverage and reimbursement contributed to increased health care access, especially among vulnerable patient populations.

Finding 2: A number of studies in a range of settings suggested an association between audio-only telemedicine and improved clinical outcomes.

Numerous articles – most reporting on research conducted prior to COVID-19 – assessed the relationship between audio-only telemedicine and clinical outcomes for a range of behavioral and physical health conditions. Over 80% of articles reviewed reported positive associations between audio-only telemedicine and clinical outcomes.

Finding 3: Association between audio-only telemedicine and cost savings differed from patient and payer perspectives.

Relative to in-person visits, audio-only telemedicine was associated with patient cost savings, largely derived from lower travel expenses. There was mixed evidence on provider and payer cost savings.

The full literature review appears in Appendix B of this report.

Relative costs of audio-only telemedicine

VSSL's cost review was conducted to provide estimates of the cost of audio-only telemedicine to providers as compared to other types of telemedicine or in-person services. Unlike hospitals and nursing homes, physicians and other practitioners are not required to submit cost reports to the federal government for the Medicare program. The federal Health and Human Services/Centers for Medicare and Medicaid Services (CMS) calculates physician and provider reimbursement for the Medicare program under a system called the "resource-based value relative value scale" (RBRVS). This reimbursement system is used by many other health care programs and payers. The RBRVS system is based on the principle that payments for physician services should vary with the resource costs for providing those services. There are three primary elements to the relative value units – physician work, practice expense and professional liability insurance (malpractice insurance).

VSSL reviewed Relative Value Units (RVUs) for commonly used Current Procedural Terminology (CPT) codes – often called "evaluation and management (E&M) codes" – used for office visits or encounters with patients. It compared reimbursement values of audio-only E&M codes (CPT 99441-99443) to office visit CPT codes (99212-99214).

Between 2020 and 2022, under revised Medicare rules implemented during the COVID-19 pandemic, reimbursement values for CPT 99441-99443 were matched to values for CPT 99212-99214. In particular, CPT 99441 and 99212 had identical values for:

- Work RVUs (0.48 in 2020, 0.70 in 2021 and 2022)
- Practice expense RVUs for non-facility providers (0.75 in 2020, 0.89 and 0.89 in 2021 and 2022, respectively)
- Practice expense RVUs for facility providers (0.20 in 2020, 0.29 in 2021 and 2022).

Total RVUs differed due to slight differences in malpractice RVUs between CPT 99441-99443 and CPT 99212-99214.

Examining data from 2019 and 2020, prior to reimbursement parity implemented during the COVID 19 pandemic, demonstrates differences for audio-only telemedicine versus other services. Extending the example above, RVU values in 2019 for CPT 99212 (work RVU 0.48; practice expense RVU 0.75; malpractice RVU 0.05) were comparable to values under revised 2020 rates. In contrast, revised values in 2020 were significantly higher than 2019 and initial 2020 values for telephone evaluation and management services. In particular, compared to 2019 values, work RVUs under revised 2020 rules were 92% higher; practice expense RVUs were 477% and 100% higher for non-facility and facility providers, respectively; and malpractice RVUs were 500% higher.

Translated into dollars for Medicare reimbursement, for CPT 99441, total reimbursement between 2019 and revised 2020 rules increased for non-facility providers from $14.06 to $46.20 per service ($32.14 per service increase) and for facility providers from $12.97 to $26.35 per service ($13.38 per service

increase). Qualitatively similar dynamics were observed for CPT 99442 and 99443, with significant increases between 2019 and revised 2020 rules.

The full analysis appears in Appendix B of this report.

Methods to measure the impact of audio-only telemedicine on health care access for historically underserved populations and geographic areas

The Legislature expressed interest in understanding the impact of audio-only telemedicine on access to care for historically underserved populations and geographic areas. Based upon VSSL's analysis of APCD claims data, audio-only telemedicine services usage varied by beneficiary age, gender, payer type and urban/rural residence. Older, female, Medicaid-insured and urban-dwelling beneficiaries exhibited higher proportions of usage than might be expected based on their representation in the overall evaluation population. As shown previously, the use of audio-only telemedicine services varied widely across the state, in both urban and rural counties. While some information was gained from the claims analysis related to race and ethnicity, because race and ethnicity data is missing from approximately half of APCD claims, the analysis doesn't provide as full a picture.

The literature review found that, with respect to access, the following groups were more likely than other groups to use audio-only telemedicine:

- Racial and ethnic minorities
- Geographically remote communities
- Individuals who were uninsured
- Individuals who were non-English speaking or had limited English proficiency
- Individuals with limited digital literacy or transportation difficulties

Articles also noted how expanded insurance coverage of and reimbursement for telemedicine services contributed to improved health care access, especially among vulnerable patient populations. Over 80% of the articles VSSL reviewed that included health outcomes data reported positive associations between audio-only telemedicine and clinical outcomes.

The APCD claims analysis, when paired with the findings of the literature review, point to the critical need to gain more information about use and impacts of access to audio-only telemedicine services on people of color, indigenous people, other historically disadvantaged groups and people living in rural communities. OIC, HCA and the Collaborative asked VSSL to provide recommendations as to how these impacts can best be determined to inform policy discussions related to coverage of audio-only telemedicine services. To that end, VSSL provided the options pictured in the following table. The limitations of Option 1 are evident, given, as noted earlier, the lack of complete race and ethnicity data in APCD claims data. The expanded and comprehensive options include the key element of hearing directly from individuals and families – through surveys, interviews, focus groups or similar activities.

Options to gain more information about use and impacts of access to audio-only telemedicine services

	Option 1: Foundational	Option 2: Expanded	Option 3: Comprehensive
Questions Answered	How does audio-only telemedicine (AOTM) impact health care access for Washingtonians? How does this impact vary for historically disadvantaged groups* versus others?	How does this impact vary by method of defining access?	What are barriers and facilitators to AOTM use and experience? How do they vary for historically disadvantaged groups?
Work Involved	Analysis of Washington State All-Payer Claims Database (WA-APCD) data †	+ Patient access survey	+ Qualitative analysis (e.g., interviews, focus groups)
Timeline	12 months	18 months	24 months

*Groups defined in detail in text of proposed methods as potential groups to study will vary by option; † Analysis of state -wide claims using advanced statistical methods

The full report on methods to measure the impact of audio-only telemedicine on access to health care for historically underserved populations and geographic areas appears in Appendix C of this report.

Recommendations

The OIC shared VSSL's findings with members of the Collaborative for their review. The following recommendations reflect a consensus among OIC, HCA and the Collaborative.

1. Research suggests a positive relationship between access to audio-only telemedicine and health outcomes. However, many studies reviewed by VSSL were conducted prior to the pandemic, and VSSL did not assess the quality of research/evidence due to the timing and funding constraints of the project. While not definitively shown through VSSL's analysis of Washington state All Payer Claims Database (APCD) claims, the literature review suggests that availability of audio-only telemedicine services disproportionately benefited underserved populations and people living in rural communities.

   In addition, Washington state is currently experiencing serious challenges related to accessing behavioral health services. There is a continued relatively high use of audio-only telemedicine for mental health disorder treatment, which points to the ongoing need for access to these services. The Legislature should sustain requirements for health carriers, state and school employee benefit programs (Public Employees Benefits Board (PEBB)/School Employees Benefits Board (SEBB)) and Medicaid-managed care organizations to cover audio-only telemedicine services, while pursuing additional opportunities to gain more information about the cost, usage and impacts of audio-only telemedicine.

2. Additional research and evidence review is recommended to evaluate whether audio-only telemedicine services provide quality care as a stand-alone option, including in relation to audio-visual and in-person care delivery. While the VSSL literature review suggested a positive correlation between use of audio-only telemedicine and health outcomes, outstanding questions remain about the direct impacts of audio-only telemedicine on client care and the broader delivery system. Any analysis should take into consideration impacts on differing demographic groups and consider whether proliferating audio-only services impacts availability of and access to in-person services. A recent article in the *Health Affairs* journal notes the importance of consumers having a meaningful choice between receiving telehealth and in-person mental health services.

3. With respect to ongoing monitoring of potential fraud, waste or abuse of audio-only telemedicine, the Medicaid managed care organization (MCO)/carrier survey VSSL conducted suggests there could be more proactive inquiries into the appropriate use of audio-only telemedicine. Additionally, all organizations with oversight responsibility for telemedicine, including regulatory agencies, purchasers and payers, should stay abreast of any usage trends or concerns regarding the clinical impact of audio-only telemedicine.

   To provide additional information regarding oversight of audio-only medicine use, the Washington Medical Commission (WMC) researched four fiscal years of disciplinary actions. Of 412 total disciplinary actions, WMC found 13 total disciplinary actions that relate in some way to telemedicine. Of these, the presence of audio-only telemedicine was incidental to other conduct by the provider. Much of the online prescribing/telemedicine issues that occurred during that

period involved COVID-19 and misinformation issues. The bulk of the violations involved not properly establishing a patient relationship, improper documentation of treatment and improper or lack of documented clinical decision making. Many of these practices, as they related to COVID-19 treatments, stemmed from out-of-state entities claiming treatments were outside the mainstream medical understanding of effective medicine.

The WMC has not had substantial complaints involving telemedicine outside of those described above. The remainder of the disciplinary actions show telemedicine is tangential to the failure of health care providers to meet the applicable standard of care and are not typically the central issue.

4. Evaluate how audio-only telemedicine affects access to care among historically underserved communities and geographic areas. Despite some suggestive evidence that audio-only telemedicine can improve equity, formal evaluations as described in the section starting on page 25 of this report should be undertaken as a high priority. Three options are offered for guiding this evaluation. They incorporate quantitative and qualitative analyses and note the insights that each option could yield.

5. Evaluate how audio-only telemedicine affects provider and health care payer costs. The VSSL literature review underscores how audio-only telemedicine can save costs for patients. However, evidence was too limited to draw conclusions regarding hospital or payer costs, including the appropriateness of audio-only telemedicine payment parity, which should be the focus of future evaluations. Further evaluations of provider and payer costs could determine, using the APCD and other sources, whether audio-only telemedicine visits substitute for in-person visits or are additive. Evaluations should consider the impact of telemedicine payment parity on access to care, as well as health care provider and facility revenues, including the ability of brick-and-mortar providers to sustain telemedicine in their practice, and its impact on state costs.

6. Evaluate the differences between telemedicine-only and brick-and-mortar providers. The carrier/Medicaid MCO survey showed that carriers and MCO's perceive certain differences between telemedicine-only and brick-and-mortar providers. Evaluation is needed to identify and quantify differences in the quality and cost.

7. Consider incorporating audio-only telemedicine into value-based purchasing and care. The carrier/Medicaid MCO survey results indicated that little work has occurred to date to integrate audio-only services into value-based purchasing and care. This is an opportunity that OIC, HCA and the Collaborative could explore further through evaluation or a dedicated working group.

Appendices

The appendices for this report are available online at https://www.insurance.wa.gov/legislative-and-commissioner-reports or by using the links below.

- Appendix A – All Payer Claims Database report: https://www.insurance.wa.gov/media/11820
- Appendix B – Carrier/MCO survey & literature review: https://www.insurance.wa.gov/media/11819
- Appendix C – Proposed methods: https://www.insurance.wa.gov/media/11818