Appendix B: Evidence Assessment Report

AUDIO-ONLY TELEMEDICINE EVALUATION WORK 2023

Executive Summary

ESHB 1196 (2021) directed the Office of the Insurance Commissioner (OIC), in collaboration with the Washington State Telehealth Collaborative and the Health Care Authority to undertake a study related to audio-only telemedicine and report findings of the study to the legislature by November 1, 2023. To complete this directive, OIC contracted with the Value & Systems Science Lab to prepare a health claims data analysis report, conduct a literature search, and field a survey of health carriers and Medicaid managed care organizations in Washington state. This report contains information and findings from a literature review and survey.

Literature Review

The majority of the articles reported work that was conducted prior to COVID-19. The wide variation in methods (e.g., populations studied, study design, analytic methods) preclude definitive overarching conclusions. However, there is suggestive evidence in a range of settings for the association between audio-only telemedicine and improved access to care, clinical outcomes, and patient cost savings.

With respect to access, five articles reported that 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 healthcare access, especially among vulnerable patient populations.

With respect to outcomes, 49 articles – 45 reporting on work conducted prior to COVID-19 and 4 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. Over 80% of articles reported positive associations between audio-only telemedicine and clinical outcomes.

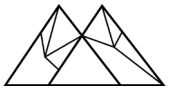
With regards to cost savings, three articles reported that relative to in-person visits, audio-only telemedicine was associated with patient cost savings largely derived from lower travel expenses. Across seven articles, there was mixed evidence on provider and payer cost savings.

Survey

The survey was fielded among a set of 12 insurance carriers in Washington to assess carrier perceptions and observations about a number of issues related to audio-only telemedicine. 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, including behavioral health treatment; preventive and wellness services and 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

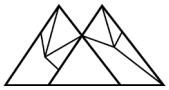


(Established Relationship Law), and disallowing facility fees to be billed (Facility Fee Law). Due to a number of factors – including lack of automated systems, labor intensive process, no requirement to monitor for compliance – carriers very infrequently monitored providers for compliance with these laws.

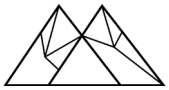
Finding 3: In a number of instances, carriers did not conduct fraud audits and generally perceived that audio-only telemedicine fraud occurred infrequently. For all three audio-only telemedicine laws (Patient Consent, Established Relationship, Facility Fee), half or more carriers did not perform fraud 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.

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 incidence 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, no carriers have incorporated audio-only telemedicine in value-based purchasing and care. Carriers perceived both challenges and opportunities integrating audio-only telemedicine into value-based purchasing arrangements or value-based care programs. At the time the survey was conducted, no carriers



reported experience doing so.

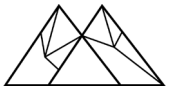


Introduction

In 2021, the Legislature enacted ESHB 1196, which required that audio-only telemedicine be a covered service reimbursed at parity with health services provided in person. Section 8 of ESHB 1196 directs the Office of the Insurance Commissioner (OIC), in collaboration with the Washington State Telehealth Collaborative (WSTC) and the Health Care Authority (HCA), to study and make recommendations related to audio-only telemedicine. The OIC and collaborators engaged the Value & Systems Science Lab (VSSL) at the University of Washington School of Medicine to assist with this directive.

In collaboration with the OIC, WSTC, and HCA, VSSL (1) performed a literature review on regulatory experiences, costs, and clinical effectiveness of audio-only telemedicine, (2) conducted a web-based survey of commercial carriers and Medicaid Managed Care Organizations to evaluate specific domains relevant to coverage of audio-only telemedicine services, (3) conducted an audio-only telemedicine utilization analysis of audio-only telemedicine utilization trends in Washington state between January 2022 and November 2022, and (4) developed a set of proposed methods for future evaluations to measure the impact of audio-only telemedicine on access to health care services for historically underserved communities and geographic areas. This report contains information and findings from the first two components (literature review, survey).

Audio-Only Telemedicine Evidence Assessment Report



Approach

To assess evidence about the use and impact of audio-only telemedicine, we conducted (1) a systematic review of peer-reviewed literature, (2) additional literature review and (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*. The cost review was conducted to provide estimates of cost of audio-only telemedicine to providers, as compared to other types of telemedicine or in-person services.

1. Systematic Literature Review

The systematic review was based on PRISMA guidelines and conducted using the PubMed database. We included articles published in English between 2015-2023 and pertaining to work occurring in the United States. The review also focused on audio-only telemedicine as a type of synchronous telemedicine, defined as telemedicine services where a health care professional and patient are directly interacting in real time.

To incorporate best practices into a robust search, we generated a search strategy based on a combination of our expertise and dedicated consultation with a health sciences librarian. This approach yielded a set of search terms and strings for each of the three domains of interest: *Regulatory Experiences*, *Costs*, and *Clinical Effectiveness*. Given an evolving body of evidence about audio-only telemedicine, we conducted two rounds of review — one in 2022, the other in 2023 – to promote identification and capture of articles over time.

Process

Both rounds used the same search strings and terms, and a multi-step approach:

- Step 1: Titles and abstracts of all articles generated from searches for each of the three domains were independently screened by two team members to identify relevant articles of interest that aligned with the three domains in our scope of work.

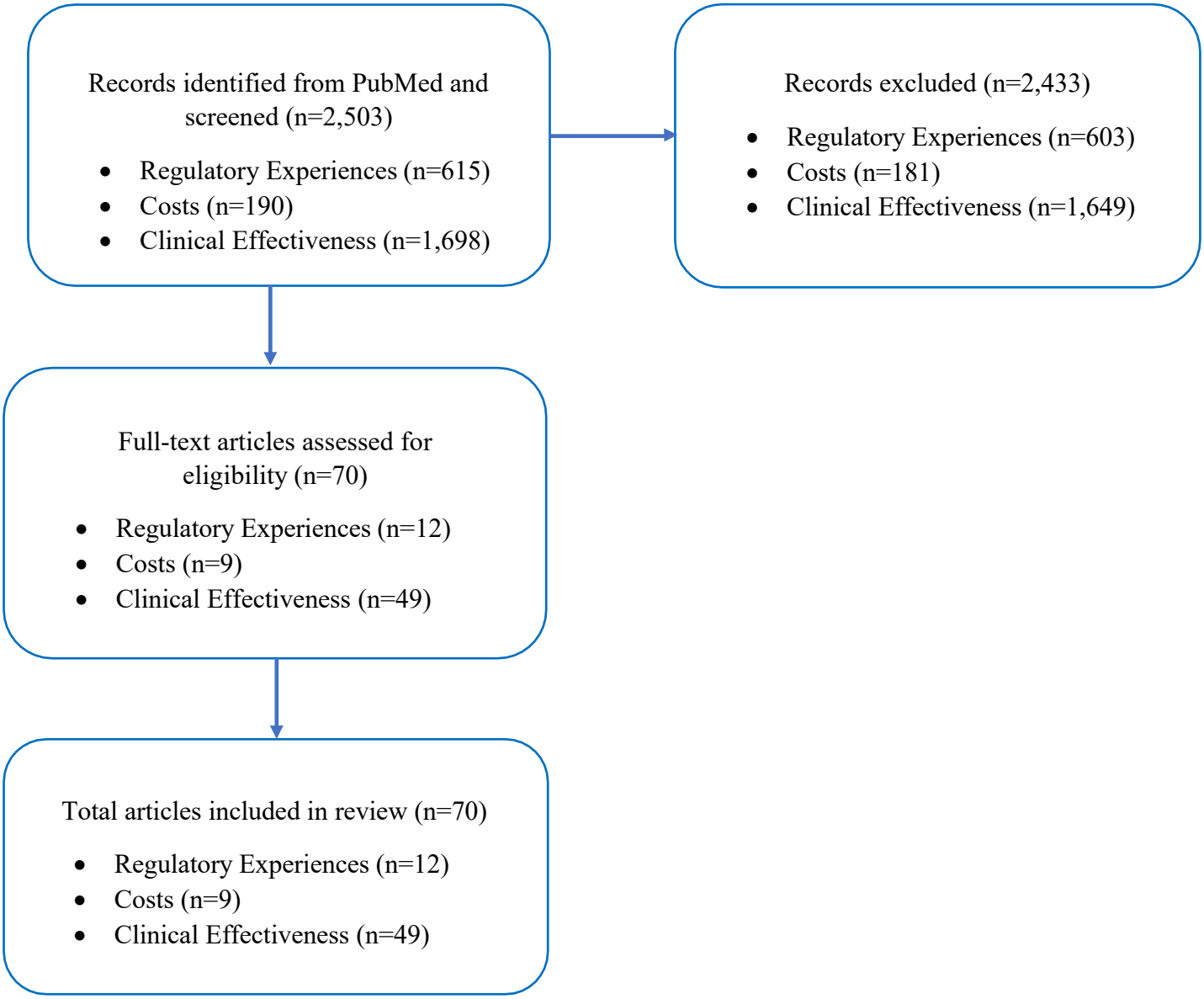
- Step 2: These two team members cross-checked each other's work, and introduced a third team member with clinical experience to review all the relevant articles identified, resolving any discrepancies via discussion.

- Step 3: As an additional layer of review, candidate articles were presented to another, fourth team member with clinical experience for input on inclusion versus exclusion.

- Step 4: Articles for which consensus could not be achieved were put up for discussion and adjudication for inclusion or exclusion among the entire team, which included clinicians, public health professionals, and a health economist.

Collectively, these steps were used to finalize lists of relevant articles. A total of 70 articles across the three domains were ultimately included in the review (Figure 1). These articles were reviewed in full text and summarized in our findings.

Figure 1. Flow diagram of systematic literature review process



Exclusion Criteria

We excluded articles that focused on asynchronous telemedicine, defined as telemedicine services where the health care professional and patient are not interacting directly in real time.

Articles that had both synchronous and asynchronous components combined as part of an intervention (e.g., telephone calls complementing self-management health app) were excluded. Articles without an abstract and articles describing study protocols and ongoing trials/studies were excluded. Studies not conducted in the United States were excluded.

Forms of Audio-Only Telemedicine in Included Articles

There was variation in what comprised audio-only telemedicine. For instance, in some cases, telemedicine services were used as an aftercare intervention following a primary intervention, while in other cases, telemedicine services were used as part of a triaging program or in conjunction with other interventions (e.g., group teleconferences, educational resources, etc.). Given the need to understand audio-only telemedicine use amid rapid uptake of different forms, we adopted a more inclusive approach by including variations of audio-only telemedicine. However, findings should be interpreted in view of the nature and form of audio-only telemedicine services within included articles.

Methodologies in Included Articles

Variation existed in methodologies used to assess associations between audio-only telemedicine and outcomes. Study designs ranged from randomized (controlled) trials to secondary analysis of randomized trials, retrospective and prospective cohort studies, cross sectional studies, case series, and reviews. Given the need to understand audio-only telemedicine, we adopted a more inclusive approach by including articles involving a range of study designs and methodologies. However, findings should be interpreted in view of the strengths and weaknesses of methodological approaches used in included articles.

Within the *Regulatory Experiences* domain, we categorized articles into subsets of topics related to audio-only telemedicine: (1) Healthcare access; (2) Reimbursement and coverage; and (3) Other policy considerations. The emphasis of for the *Costs* domain was on cost outcomes (cost expenditures and cost savings). The emphasis for the *Clinical Effectiveness* domain was on clinical conditions, categorized into behavioral health and physical health categories, and clinical outcomes, categorized by patient-reported morbidity versus other morbidity.

Findings for each domain and topic subsets were reported based on the nature of articles included for the domain. For instance, articles in the *Costs* and *Clinical Effectiveness* domains involved quantitative assessment of the relationship between audio-only telemedicine and outcomes and were therefore sorted by nature of association – positive association, negative association, no association, or mixed association. Articles in the *Clinical Effectiveness* domain were additionally classified by time period as reporting on work occurring before COVID-19 versus work occurring after the start of COVID-19. Given the lack of quantitative analysis used in articles from the *Regulatory Experiences* domain, articles were qualitatively described based on themes and topics but not by nature of quantitative associations.

2. Additional Literature Review

As a complement to the systematic review, additional literature review was also conducted to identify articles discussing audio-only telemedicine. This review focused on articles created from a set of organizations and groups, and involved two steps.

In the first, leaders from the OIC, WSTC, and HCA drew upon their existing expertise and experience to identify organizations and groups for inclusion in the review. These organizations

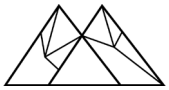
were as follows: National Association of Insurance Commissioners, Medicaid Medical Directors Network, Center for Evidence-Based Policy MED project, Center for Connected Health Policy, and Manatt, Phelps & Phillips.

In the second step, the VSSL team supplemented the list by identifying additional organizations and groups for inclusion. This included Mathematica, RAND Corporation, Research Triangle Institute, Milliman, Kaiser Family Foundation, Milbank Memorial Fund, McKinsey & Company, Deloitte, Accenture, Boston Consulting Group, Bain & Company, Klynveld Peat Marwick Goerdeler, The Advisory Board Company, Moss Adams, Booz Allen Hamilton, ABT Associates, and The MITRE Corporation. Articles pertaining to audio-only telemedicine were identified and obtained based on outreach to a group or organization's point of contact and/or review of publicly available information online.

This process yielded a total of 60 articles. To create alignment and complements to the systematic review where possible, the additional review summarized findings from these articles as broadly applicable to *Regulatory Experiences, Costs,* and *Clinical Effectiveness* domains with emphasis on information not identified in the systematic review.

3. Cost Review

For a number of reasons, the costs of providing audio-only versus other telemedicine or in-person services can be difficult to estimate across providers (e.g., differences in organizational and service line structures; variation in staffing models; use of different technology platforms; variable cost accounting methods, etc.). Such data are also not widely available.



Therefore, the cost review was based on assessment of Current Procedural Terminology (CPT) codes, which define the nature of different health care services, and Relative Value Unit (RVU) values, units in the methodology used by the Centers for Medicare and Medicaid Services and many commercial payers. RVUs are assigned to a particular health care service based on the extent of physician work and resources needed to deliver that service (defined by a CPT code), relative to all health care services. RVUs are ultimately converted into dollars for reimbursement. CPT and RVU-based values represent widely available reimbursement information that does not directly reflect a given provider's costs, but explicitly seeks to quantify clinician work and practice expenses.

RVU values were reviewed for a set of CPT codes denoting telephone services provided by physicians (CPT 99441-99443) and non-physician health care professionals (98966-98968), which were operationalized in the review as audio-only telemedicine services. Specifically:

CPT 99441-99443. Telephone evaluation and management (E/M) service by a physician or other qualified health care professional who may report E/M services provided to an established patient, parent, or guardian not originating from a related E/M service provided within the previous seven days nor leading to an E/M service or procedure within the next 24 hours or soonest available appointment.

99441. 5-10 minutes of medical discussion.

99442. 11-20 minutes of medical discussion.

99443. 21-30 minutes of medical discussion.

CPT 98966-98968. Telephone E/M service by a qualified nonphysician health care professional to an established patient, parent, or guardian not originating from a related E/M service provided within the previous seven days nor leading to an E/M service or

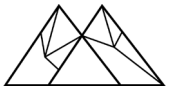
procedure within the next 24 hours or soonest available appointment.

98966. 5-10 minutes of medical discussion.

98967. 11-20 minutes of medical discussion.

98968. 21-30 minutes of medical discussion.

In addition, RVU values were also reviewed for CPT codes corresponding to office evaluation and management visits for new patients (CPT 99201-99205) and established patients (CPT 99211-99215). These visits could be billed as in-person or audiovisual telemedicine, permitting comparison to audio-only CPT codes. RVUs and corresponding dollar amounts for these collections of CPT codes were reviewed between 2019-2022 to provide pre-pandemic (2019-early 2020) and pandemic (early 2020-2022) view of costs. The review accounted for the fact that during the COVID-19 public health emergency, the Centers for Medicare & Medicaid Services instituted payment parity for audio-only telemedicine services by matching total reimbursement (values for work, practice expense, and malpractice RVUs) for CPT 99441-99443 to CPT 99212-99214 on April 30, 2020, retroactive to March 1, 2020.



Systematic Literature Review

A. Regulatory Experiences of Audio-Only Telemedicine

Twelve articles that discussed regulatory experiences relevant to audio-only telemedicine were included. Articles were categorized into subsets of topics: healthcare access, reimbursement and coverage, and other policy considerations.

Healthcare Access

Several articles reported the positive impact of audio-only telemedicine on expanding access to healthcare services. 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.

Britz et al. (2022) highlighted that audio-only telemedicine in primary care has played a crucial role in "providing equitable access to mental health services." For instance, audio-only telemedicine was noted to be "more common among patients who were uninsured, Medicare beneficiaries, non-English speaking, and racial and ethnic minorities." Payán et al. (2022) reported that patients who were older, had limited English proficiency, and had limited digital literacy were reported to have greater access to audio-only visits. Those populations tended to face more technological barriers (e.g., experienced more challenges with video technology and access to technological resources; require more technological support), and as such, generally disliked video visits.

In another article, Rosen et al. (2021) suggested that telemental health implemented after the COVID-19 outbreak supported continuity of mental health services among Veteran populations.

In particular, compared to the pre-pandemic period, the Veterans Health Administration saw a five-fold increase in audio-only telemedicine by a few months into the pandemic in June 2020.

Additionally, Levander et al. (2022) argued that telemedicine buprenorphine prescribing allowed by pandemic-driven policy changes may have expanded access to addiction services for patients with opioid use disorder, especially those who were "previously disengaged for reasons including geography, lack of housing, transportation difficulties, and mistrust of traditional healthcare systems." Barry and Hawryluk (2022) reported that in the context of dermatologic care, teledermatology supported access to care among underserved populations and geographically remote communities. On the other hand, Budak et al. (2021) suggested that while some data show that "telemedicine has facilitated retention in care, other studies have found increasing numbers of patients lost to follow-up."

Reimbursement and Coverage

Articles underscored the importance of telemedicine coverage and reimbursement. Writing from the perspective of a large safety-net health care delivery system, Lau et al. (2020) highlighted how expanded insurance coverage and reimbursement on telemedicine services contributed to healthcare access, especially among vulnerable patient populations. Specifically, changes in audio-only telemedicine coverage and payment parity emerging from COVID-19 allowed New York City Health + Hospitals to conduct approximately 83,000 billable telemedicine visits in a month, along with more than 30,000 behavioral health encounters via telephone and video in March 2020.

Lee et al. (2021) noted an increase in telemedicine visits after the start of the pandemic, with

coverage for telephone visits at the vast majority (95%) of clinics studied. Barry and Hawryluk (2022) noted that moving forward, the feasibility of telemedicine services would depend on federal legislation supporting "adequate reimbursement for providers with parity between live, video, and phone visits."

Articles also noted the importance of reimbursement that considers the logistical and coordination work involved in audio-only telemedicine. For example, Kheir et al. (2019) noted that the amount of work required for telephone support within arthroplasty episodes of care should be appropriately documented and considered in "time and intensity" by the Relative Value Scale Update Committee. Shah et al. (2021) noted that COVID-19 policy changes have allowed for "precise documentation of patient touchpoints" and that "cell phones have opened channels of contact that did not exist before, including phone accessibility, text messaging, and video calls." The authors suggested that these points supported audio-only telemedicine reimbursement and helped "defend against current payer efforts to cut work relative value units."

Other Policy Considerations

Though COVID-19 drove major regulatory changes in telemedicine, several articles suggested that the sustainability of these changes remains uncertain (Bakitas et al., 2021; Schofield, 2021), and that post-pandemic reimbursement policy decisions (Bakitas et al., 2021; Lau et al., 2020; Payán et al., 2022; Schofield, 2021) and "interventions to increase patient digital literacy and technological resources" (Payán et al., 2022) were factors that would contribute to the continued use of audio-only telemedicine. Other identified policy considerations included issues related to long-term audio-only coverage; broadband connectivity; disparities in access to telemedicine; appropriate payment for telemedicine versus in-person care; concerns about fraud, quality, and

safety; and the need for additional data to inform future policymaking (Schofield, 2021).

B. Costs of Audio-Only Telemedicine

A total of nine articles investigating associations between audio-only telemedicine and cost outcomes (cost expenditures and cost savings) were included. These cost outcomes were assessed as coming from patient, provider, and payer perspectives. More than half of the articles (5/9) reported positive associations between audio-only telemedicine use and cost outcomes. Over a third of the included articles (4/9) reported negative or no associations.

Positive Associations

Five articles reported positive associations between audio-only telemedicine use and cost savings. Robinson et al. (2017) evaluated pre-surgery telephone assessment to determine surgical eligibility for children with cerebral palsy and described that telephone prescreening saved patients an average of 659 miles in additional travel distance, which translated to an average saving of $344. Additionally, the article reported increased odds of utilizing telephone-based evaluation "for each increase of 10 miles in distance from the health center."

Datta et al. (2021) explored audiovisual and audio-only telemedicine visits at an epilepsy center and analyzed cost savings by accounting for patient travel costs (gas and time costs). On average, patients resided 47.7 miles from the epilepsy center where they received face-to-face care. Telemedicine cost savings were estimated at "$30.20 ± 3.8 per visit." Richter et al. (2015) compared audiovisual to phone counseling for tobacco treatment delivered to smokers in primary care and safety net clinics across Kansas, finding that phone counseling was less expensive from both the provider and patient perspectives primarily due to the absence of facility and travel costs,

respectively. The average total provider costs for phone counseling was $53.25, and ranged between $47.04 and $272.65 for audiovisual counseling. An additional $94 from travel-related time and mileage costs were calculated to be incurred by the participants in the audiovisual intervention arm.

Other articles assessed cost expenditures and savings from the payer perspective. Iqbal et al. (2017) reported that telephone-based post-operative follow-up for patients who had ileostomy contributed to a 49% reduction in readmission rates and reduction in hospital length-of-stay by one day, which translated to a total annual cost savings of $63,821 ($48,821 due to decreased readmissions and $15,000 due to decreased length-of-stay). Another article by Schechter et al. (2015) described a telephonic diabetes intervention administered to diabetic adult patients in South Bronx, New York and assessed interventional costs based on labor, telephone charges, facilities, and equipment. This article noted that the direct cost of the telephonic intervention per patient was $187.61, and $464.41 per percentage point of A1c improvement. The article also reported that "varying the intensity of support" among those with poor glycemic control led to "lower cost and increased effectiveness" of the intervention.

Negative Associations

Three articles described negative associations between audio-only telemedicine use and cost savings from a payer perspective. Ashwood et al. (2017) explored telephone and audiovisual telemedicine visits for acute respiratory infections and concluded that greater telemedicine utilization was associated with increased overall payer expenditures, as most telemedicine visits appeared to be additional visits (88%) rather than substitutes for other visits (e.g., office and ED) (12%). The authors concluded that "cost savings from substitution were outweighed by the

increased spending from new utilization" and "estimated that there was a net $45 per person increase in acute respiratory infection spending among the [telemedicine] cohort."

Another article by Nouryan et al. (2018) assessed Medicare patients with heart failure receiving telemedicine services "after discharge from home care for 6 months." The article compared the costs of audiovisual telemedicine visits, provided alongside daily vital sign monitoring, versus weekly audio-only telemedicine visits. Patients who received audiovisual visits had lower rates of all-cause ED utilization and length-of-stay. As such, the "costs were $38,990 for [audiovisual visits] versus $50,943 for [audio-only telemedicine visits]."

Mohr et al. (2019) compared guided internet cognitive behavioral therapy (iCBT) versus telephonic cognitive behavioral therapy (t-CBT) administered to patients with depression. The authors assessed interventional costs by accounting for therapist, fringe, and overhead costs, and reported that therapist time in tCBT was almost double the amount of therapist time in iCBT (10.16 hours versus 5.26 hours). This translated to a cost difference of $364.32 ($756.13 per tCBT patient vs. $391.81 per iCBT patient). When compared with the internet-based intervention, the telephone-based intervention led to higher payer expenditures and lower savings.

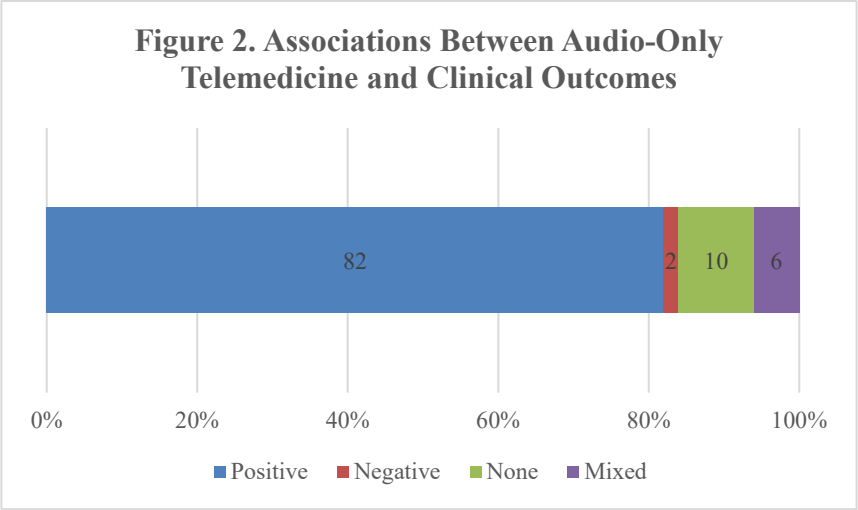
No Associations

One article adopted a provider perspective and described no associations between audio-only telemedicine and cost expenditures. In particular, Schreiter et al. (2021) compared hospital costs and margins (the difference between reimbursement and cost) for patients receiving telephone-based surgical transitional care program (t-STCP) versus usual care after abdominal surgery.

The article reported no difference in 90-day readmission costs or margins for the hospital between the t-STCP and usual care groups.

C. Clinical Effectiveness of Audio-Only Telemedicine

Fourty-nine articles investigating associations between audio-only telemedicine and clinical outcomes were included. Overall, more than 80% of these articles reported positive associations between audio-only telemedicine and clinical outcomes (Figure 2). Fewer reported negative associations (2%), mixed associations (6%) or no associations (10%).



Of the 49 articles, 45 reported on work occurring prior to COVID-19 and four articles reported on work occurring after the start of COVID-19. The majority of the articles relevant to clinical effectiveness that were conducted prior to COVID-19 (82%) and after the start of COVID-19 (75%) reported positive associations between audio-only telemedicine and clinical outcomes (Figures 3 and 4).

Figure 3. Associations Between Audio-Only Telemedicine and Clinical Outcomes, Prior to COVID-19

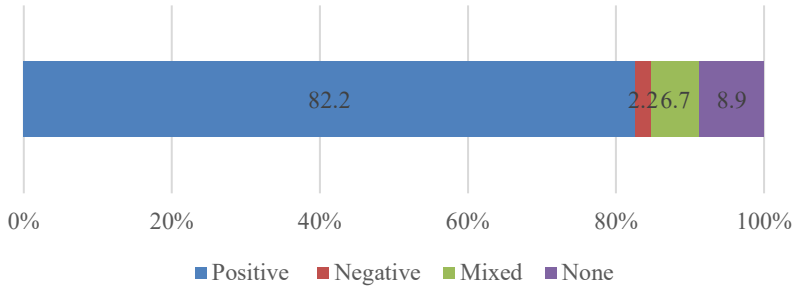
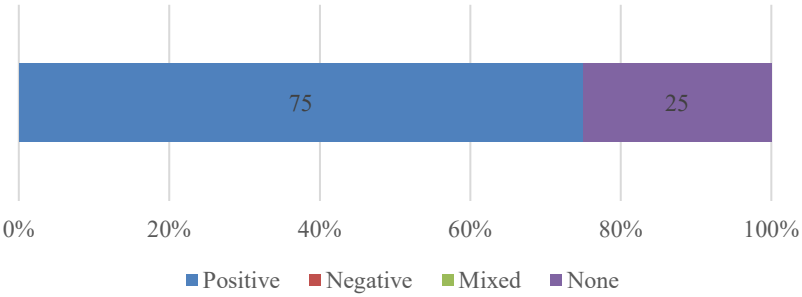


Figure 4. Associations Between Audio-Only Telemedicine and Clinical Outcomes, After the Start of COVID-19



Collectively, these articles encompassed a broad range of clinical conditions, which were categorized as behavioral health versus physical health. Behavioral health encompassed psychological conditions including depression, anxiety, and post-traumatic stress disorder (PTSD); substance use; and smoking cessation. Physical health encompassed other conditions, such as diseases and weight management.

Outcomes were categorized by patient-reported morbidity versus other morbidity. Specifically, patient-reported morbidity outcomes assumed the form of self-reported measures and scores

(e.g., anxiety, depression, or well-being scores, patient-reported symptoms and complaints), and other morbidity outcomes assumed the form of physical measurements and tests (e.g., biometric data, A1c, and viral load). Only one article reported a mortality outcome, with stillbirth as the metric.

Among the 49 included articles, 24 focused on behavioral health, 23 focused on physical health, and 2 focused on both behavioral and physical health. Most articles (39/49) reported positive associations between audio-only telemedicine intervention (e.g., therapy, counseling, triage, follow up, visit) and morbidity outcomes. Less than a quarter of articles (10/49) reported negative, mixed, or no associations.

Behavioral Health and Physical Health

Two articles assessed both behavioral health and physical health. Both articles assessed patient-reported and other morbidity outcomes.

Positive Associations

One article described associations between telephone-delivered behavioral health counseling and fewer depression symptoms and lower HIV viral load (Kalichman et al., 2021).

Mixed Associations

Another article examining a telephone-delivered diabetes and depression behavioral health coaching program noted positive associations for clinically significant depression symptoms (the coaching program was associated with a decline in depression symptoms), but no association between the program and glycemic control (the coaching program was not associated with

changes in HbA1c) (Naik et al., 2019).

Behavioral Health

Among the 24 articles that focused on behavioral health, all assessed patient-reported morbidity outcomes. Of those, one article also assessed other morbidity outcomes.

Positive Associations

Overall, 20 articles reported positive associations between audio-only telemedicine interventions and desired behavioral health outcomes. In particular, these articles reported positive associations on depression measures (Barrera et al., 2017; Brenes et al., 2015; Butterfield et al., 2017; Dobkin et al., 2020; Fann et al., 2015; Mavandadi et al., 2015; Mercier et al., 2015; Mochari-Greenberger et al., 2017; Nicholas et al., 2021; Posmontier et al., 2016; Thompson et al., 2015; Turner et al., 2016; Bell et al., 2017). For instance, Dobkin et al. (2020) reported that telephone-based cognitive-behavioral treatment (T-CBT) outperformed usual treatment "on all depression, anxiety, and quality of life measures" and resulted in a reduction in negative thoughts and improved depression score over a three-month treatment and six-month follow-up among patients with depression and Parkinson's Disease.

Similarly, Nicholas et al. (2021) reported T-CBT to be efficacious at reducing depression symptoms after five weeks of treatment. Posmontier et al. (2016) reported that certified nurse-midwife telephone-administered interpersonal psychotherapy (CNM-IPT) was effective in reducing the severity of postpartum depression symptoms. Among women who received CNM-IPT, the depression score was lower compared to the control group at eight and twelve weeks of treatment.

Articles also reported positive associations between audio-only telemedicine and anxiety measures (Barrera et al., 2017; Brenes et al., 2015; Dobkin et al., 2020; Mavandadi et al., 2015; Mochari-Greenberger et al., 2017; Rollman et al., 2017) and quality of life (Butterfield et al., 2017; Dobkin et al., 2020; Hudson et al., 2015; Rollman et al., 2017; Thompson et al., 2015). Brenes et al. (2015) reported that T-CBT was associated with a decline in self-reported worry severity and anxiety symptoms at four-month follow-up among rural older adults with generalized anxiety disorder. Barrera et al. (2017) reported that telephone-delivered psychoeducational care improved behavioral health-related quality of life, anxiety, and mood symptoms among highly anxious patients.

Other outcomes for which there were positive associations included: mood (Rollman et al., 2017) and stress (Mochari-Greenberger et al., 2017) symptoms, sleep (Bell et al., 2017; McCurry et al., 2021), fatigue (Hall et al., 2017; McCurry et al., 2021; Turner et al., 2016), pain (McCurry et al., 2021), alcohol and drug outcomes (Timko et al., 2019), psychological distress (Bell et al., 2017), and PTSD outcomes (Bell et al., 2017; Fortney et al., 2015; Hoerster et al., 2015).

In particular, Bell et al. (2017) reported that telephone-delivered problem-solving treatment reduced psychological distress at six months of treatment, in addition to short-term improvements on sleep, depression, PTSD, and physical functioning, among service members with mild traumatic brain injury. In another article, Hoerster et al. (2015) reported that a telephone-based collaborative care model was associated with reductions in PTSD symptoms over the course of treatment among Iraq/Afghanistan veterans with PTSD.

Mixed Associations

An article by Pimentel et al. (2015) reported mixed associations – positive associations for some outcomes and negative associations for others – between audio-only telemedicine and behavioral health outcomes. In that article, use of a telephone triaging program was associated with lower delirium scores but greater pain, fatigue, depression, and lower well-being scores.

No Associations

Three articles reported no statistically significant associations between audio-only telemedicine and behavioral health outcomes. These articles assessed outcomes related to depression (Shah et al., 2023), psychosocial outcomes (Mackelprang et al., 2016), quality of life (Shah et al., 2023), and smoking cessation (Richter et al., 2015). For example, Richter et al. (2015) reported that compared to the control group, participants who smoke and were receiving phone counseling were not more likely to use cessation medications and did not differ in smoking abstinence at twelve months.

Physical Health

Among 23 articles, seven assessed patient-reported morbidity outcomes, thirteen assessed other morbidity outcomes, and three assessed both types. One article that looked at nonpatient-reported morbidity outcomes included a mortality outcome (metric: stillbirth) (Duryea et al., 2021).

Positive Associations

Nineteen articles reported positive associations between audio-only telemedicine and physical health outcomes related to diabetes (Egede et al., 2017; Moran et al., 2022; Murry et al., 2020; Myers et al., 2021), hypertension (Moran et al., 2022; Zullig et al., 2022), kidney disease

(Moran et al., 2022), and cardiovascular disease (Woo et al., 2023).

For instance, Egede et al. (2017) reported that telephone-delivered education and behavioral skills intervention was associated with a "significant decline in hemoglobin A1c over time." Moran et al. (2022) reported that audio-only telemedicine was "noninferior to in-person or hybrid models for chronic disease management" as it yielded "similar control of renal disease, hypertension control, and diabetes management." Woo et al. (2023) reported that audio-only telemedicine use was associated with fewer overall cardiovascular events among patients with coronary artery disease and heart failure.

Articles also reported positive associations between audio-only telemedicine and weight loss/maintenance and obesity (Bricker et al., 2021; Ferrara et al., 2020; Garza et al., 2019; O'Neal et al., 2022; Perri et al., 2020; Venditti et al., 2021). O'Neal et al. (2022), Perri et al. (2020), and Venditti et al. (2021) reported that telephone-based care was associated with reduced weight regain and sustained weight loss. In particular, Venditti et al. (2021) noted that "telephone aftercare intervention [was] associated with greater weight loss." Bricker et al. (2021) noted that compared to standard behavioral therapy, a telephone coaching acceptance and commitment therapy intervention for weight loss was associated with improved weight loss.

Positive associations were also observed for other conditions. These included tinnitus (Henry et al., 2019), urinary stone management (Nevo et al., 2021), sleep quality (Rehman et al., 2017; Vuletic et al., 2016), physical activity (Plow et al., 2019), fatigue (Plow et al., 2019; Rehman et al., 2017), and surgery (Sabbagh et al., 2021; Thompson et al., 2019). For example, Rehman et al. (2017) reported that a telephone-delivered motivational interviewing-

based coaching program improved dyspnea, fatigue, emotional function, and quality of life among patients with chronic obstructive pulmonary disease. Plow et al. (2019) reported that "group teleconferences followed by tailored phone calls have a small yet statistically significant effect in promoting physical activity and reducing fatigue impact in people with multiple sclerosis."

Negative Associations

One article from Bombardier et al. (2021) reported that telephone-delivered treatment failed to meet expectations on fitness (defined as peak oxygen consumption) among patients with spinal cord injury and cardiometabolic disease or risk factors.

Mixed Associations

One article conducted by Kobe et al. (2020) reported mixed associations by patient population. This article assessed the association between a pharmacist-delivered phone-based telemedicine intervention and diabetic kidney disease outcomes (defined as preservation or decline in estimated glomerular filtration rate). Associations differed by race: positive associations were observed for African American patients and negative associations were observed for non-African American patients.

No Associations

Two articles reported no statistically significant associations between audio-only telemedicine and physical health outcomes: perinatal (Duryea et al., 2021) and pelvic floor disorder (Schimpf et al., 2016) outcomes. Duryea et al. (2021) did not observe that audio-only prenatal visits improved perinatal outcomes such as "placental abruption, stillbirth, neonatal intensive care unit

admission in a full-term infant, and umbilical cord blood pH of less than 7.0." Schimpf et al. (2016) did not observe positive or negative associations between nursing telephone follow-up in an ambulatory care setting and differences in pelvic floor distress inventory scores.

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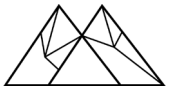

Additional Literature Review

Nationally, audio-only telemedicine was reported to be the most commonly used telemedicine modality in 2021 (HealthIT.gov, 2023). Overall, federal COVID-19 waivers allowed telemedicine delivery, including audio-only services, to become more accessible for patients (Vidal, 2023).

Nearly all articles focused on regulatory experiences or aspects of audio-only telemedicine. Several articles discussed audio-only telemedicine coverage expansions driven by the COVID-19 pandemic. For instance, audio-only telemedicine coverage expansions in Medicare and Medicaid (Guth and Hinton, 2020) included covering audio-only mental health, substance use (Lo et al., 2022) and behavioral health services (Guth, 2023) under certain conditions and issuing temporary waivers to provide care across state lines (Freed, 2020). Many states reported that policy changes contributed to high telemedicine utilization (Rudowitz et al., 2023) and helped expand audio-only telemedicine in particular (Guth, 2021).

Articles also noted how expanded use occurred in part through safety-net organizations. Federally Qualified Health Centers were reported to predominantly deliver audio-only visits over video visits since the beginning of the COVID-19 pandemic in Spring of 2020 and continued to rely on audio-only telemedicine use throughout the pandemic (Uscher-Pines et al., 2021). Most of the telemedicine appointments for lower-income patients were reported to be audio-only (RAND, 2021).

A collection of articles highlighted the equity concerns over changes in audio-only telemedicine

coverage policies. One article noted how coverage changes differed by state and changed over time (McKinnon and Tabachnick, 2020), while other articles described how many states have considered limiting coverage and reimbursement for audio-only telemedicine following the COVID-19 public health emergency (SHVS, 2020), thereby underscoring the importance of addressing coverage and reimbursement of audio-only telemedicine going forward (Koma et al., 2022; NAIC, 2022; Robeznieks, 2021; Uscher-Pines et al., 2021).

Given evidence that audio-only telemedicine can increase healthcare access, articles highlighted the equity implications of coverage policies, and in particular reimbursing video, but not audio-only, visits (Uscher-Pines et al., 2021). This concern may be amplified by the fact that more than 19 million individuals are estimated to lack access to broadband services that would support video visits (Vidal, 2023), as well as the fact that safety-net settings and patients may be unprepared and unequipped for video visits in ways that can create disproportionate negative impacts due to nearer-term elimination of reimbursement for audio-only visits (Uscher-Pines et al., 2021).

In turn, articles called for expanded coverage of audio-only visits to potentially reduce health inequity among underserved populations (Jain and Chollet, 2022); policies that bridge the digital divide between groups with versus without broadband access and more versus less digital literacy (NAIC, 2022; Uscher-Pines et al., 2021; Volz, 2021); permanent payment coverage of audio-only telemedicine to overcome the major patient barriers (e.g., digital divide) and provider barriers (coverage, payment, and reimbursement uncertainty) to promote equitable access to

health care (AMA, 2022). More broadly, equity considerations underpinned audio-only telemedicine related recommendations from numerous groups (DHCS, 2022; MMDN, 2021; NQF, 2021).

A group of articles suggested additional regulatory domains and areas – beyond payment, coverage and their access and equity implications – for future work related to audio-only telemedicine. These included fraud and abuse (Jain and Chollet, 2022; Koma et al., 2022; Uscher-Pines et al., 2021; Volz, 2021); interstate medical licensure (Koma et al., 2022; Volz, 2021); as well as confidentiality and Health Insurance Portability and Accountability Act rules (DHCS, 2022; DHHS, 2022).

No articles provided quantitative evaluations about the impact of audio-only telemedicine on clinical outcomes, though several articles noted the importance of such evaluations along with issues of clinical appropriateness, quality assurance, (Gifford et al., 2021), standard of care, patient choice (DHCS, 2022), effectiveness, and costs, business models, and logistics (NQF, 2021). Similarly, no articles included formal estimates of the cost impacts from audio-only telemedicine, but several noted the need to conduct cost evaluations to address budgetary concerns (Gifford et al., 2021; Hinton et al., 2022) and payment appropriateness (DHCS, 2022).

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Cost Review

RVU values – work RVUs, practice expense RVUs for facility and non-facility providers, and malpractice RVUs – were reviewed for CPT codes of interest, including audio-only evaluation and management (E/M) services provided by physicians (Table 1) and non-physician health care professionals (Table 2) as well as office E/M services for new patients (Table 3) and established patients (Table 4).

Between 2020 and 2022, under revised rules, 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), and 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.

Examination of data from 2019 and 2020, prior to pandemic-driven reimbursement matching, demonstrates differences for audio-only telemedicine vs 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 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.

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Table 1. Audio-Only E/M Service by a Physician or Other Qualified Healthcare Professional (CPT 99441-99443)

CPT Code	Description	CY	MPFS CF	WRVU	PE RVU – Non-Facility	PE RVU -- Facility	MP RVU	Total (Non-Facility)	Total (Facility)
99441	Telephone E/M: 5-10 minutes	2022	$34.61	0.70	0.89	0.29	0.05	1.64	1.04
				$24.23	$30.80	$10.04	$1.73	$56.76	$35.99
		2021	$34.89	0.70	0.88	0.29	0.05	1.63	1.04
				$24.42	$30.70	$10.12	$1.74	$56.87	$36.29
		2020 Revised	$36.09	0.48	0.75	0.20	0.05	1.28	0.73
				$17.32	$27.07	$7.22	$1.80	$46.20	$26.35
		2020	$36.09	0.25	0.13	0.10	0.02	0.40	0.37
				$9.02	$4.69	$3.61	$0.72	$14.44	$13.35
		2019	$36.04	0.25	0.13	0.10	0.01	0.39	0.36
				$9.01	$4.69	$3.60	$0.36	$14.06	$12.97
99442	Telephone E/M: 11-20 minutes	2022	$34.61	1.30	1.26	0.55	0.09	2.65	1.94
				$44.99	$43.61	$19.04	$3.11	$91.72	$67.14
		2021	$34.89	1.30	1.25	0.55	0.11	2.66	1.96
				$45.36	$43.61	$19.19	$3.84	$92.81	$68.38
		2020 Revised	$36.09	0.97	1.06	0.40	0.08	2.11	1.45
				$35.01	$38.26	$14.44	$2.89	$76.15	$52.33
		2020	$36.09	0.50	0.23	0.19	0.05	0.78	0.74
				$18.05	$8.30	$6.86	$1.80	$28.15	$26.71
		2019	$36.04	0.50	0.23	0.19	0.03	0.76	0.72
				$18.02	$8.29	$6.85	$1.08	$27.39	$25.95
99443	Telephone E/M: 21-30 minutes	2022	$34.61	1.92	1.71	0.82	0.12	3.75	2.86
				$66.45	$59.18	$28.38	$4.15	$129.79	$98.98
		2021	$34.89	1.92	1.70	0.82	0.15	3.77	2.89
				$66.99	$59.31	$28.61	$5.23	$131.54	$100.83
		2020 Revised	$36.09	1.50	1.45	0.62	0.11	3.06	2.23
				$54.14	$52.33	$22.38	$3.97	$110.44	$80.48
		2020	$36.09	0.75	0.33	0.29	0.06	1.14	1.10
				$27.07	$11.91	$10.47	$2.17	$41.14	$39.70
		2019	$36.04	0.75	0.33	0.29	0.04	1.12	1.08
				$27.03	$11.89	$10.45	$1.44	$40.36	$38.92

2020 Revised: established by CMS in April/2020, retroactive to March/2020. CPT: Current Procedural Terminology. CY: Calendar Year. E/M: evaluation and management. MPFS CF: Medicare Physician Fee Schedule Conversion Factor. MP RVU: Malpractice Relative Value Units. PE RVU: Practice Expense Relative Value Units. WRVU: Work Relative Value Units.

Table 2. Audio-Only E/M Service by a Qualified Nonphysician Health Care Professional (CPT 98966-98968)

CPT Code	Description	CY	MPFS CF	WRVU	PE RVU – Non-Facility	PE RVU -- Facility	MP RVU	Total (Non-Facility)	Total (Facility)
98966	Telephone E/M: 5-10 minutes	2022	$34.61	0.25	0.12	0.07	0.01	0.38	0.33
				$8.65	$4.15	$2.42	$0.35	$13.15	$11.42
		2021	$34.89	0.25	0.13	0.1	0.02	0.4	0.37
				$8.72	$4.54	$3.49	$0.70	$13.96	$12.91
		2020	$36.09	0.25	0.13	0.1	0.02	0.4	0.37
				$9.02	$4.69	$3.61	$0.72	$14.44	$13.35
		2019	$36.04	0.25	0.13	0.1	0.01	0.39	0.36
				$9.01	$4.69	$3.60	$0.36	$14.06	$12.97
98967	Telephone E/M: 11-20 minutes	2022	$34.61	0.5	0.18	0.12	0.02	0.7	0.64
				$17.31	$6.23	$4.15	$0.69	$24.23	$22.15
		2021	$34.89	0.5	0.23	0.19	0.04	0.77	0.73
				$17.45	$8.02	$6.63	$1.40	$26.87	$25.47
		2020	$36.09	0.5	0.23	0.19	0.05	0.78	0.74
				$18.05	$8.30	$6.86	$1.80	$28.15	$26.71
		2019	$36.04	0.5	0.23	0.19	0.03	0.76	0.72
				$18.02	$8.29	$6.85	$1.08	$27.39	$25.95
98968	Telephone E/M: 21-30 minutes	2022	$34.61	0.75	0.2	0.14	0.04	0.99	0.93
				$25.96	$6.92	$4.85	$1.38	$34.26	$32.19
		2021	$34.89	0.75	0.33	0.29	0.05	1.13	1.09
				$26.17	$11.51	$10.12	$1.74	$39.43	$38.03
		2020	$36.09	0.75	0.33	0.29	0.06	1.14	1.1
				$27.07	$11.91	$10.47	$2.17	$41.14	$39.70
		2019	$36.04	0.75	0.33	0.29	0.04	1.12	1.08
				$27.03	$11.89	$10.45	$1.44	$40.36	$38.92

CPT: Current Procedural Terminology. CY: Calendar Year. E/M: evaluation and management. MPFS CF: Medicare Physician Fee Schedule Conversion Factor. MP RVU: Malpractice Relative Value Units. PE RVU: Practice Expense Relative Value Units. WRVU: Work Relative Value Units.

Table 3. Office E/M -- New Patient (CPT 99201-99205)

CPT Code	Description	CY	MPFS CF	WRVU	PE RVU – Non-Facility	PE RVU -- Facility	MP RVU	Total (Non-Facility)	Total (Facility)
99201	Office Visit – New Patient E/M: 10 minutes	2022	$34.61	N/A					
		2021	$34.89						
		2020	$36.09	0.48	0.76	0.22	0.05	1.29	0.75
				$17.32	$27.43	$7.94	$1.80	$46.56	$27.07
		2019	$36.04	0.48	0.76	0.23	0.05	1.29	0.76
				$17.30	$27.39	$8.29	$1.80	$46.49	$27.39
99202	Office Visit – New Patient E/M: 20 minutes	2022	$34.61	0.93	1.12	0.41	0.09	2.14	1.43
				$32.19	$38.76	$14.19	$3.11	$74.07	$49.49
		2021	$34.89	0.93	1.10	0.41	0.09	2.12	1.43
				$32.45	$38.38	$14.30	$3.14	$73.97	$49.89
		2020	$36.09	0.93	1.12	0.41	0.09	2.14	1.43
				$33.56	$40.42	$14.80	$3.25	$77.23	$51.61
		2019	$36.04	0.93	1.14	0.42	0.08	2.15	1.43
				$33.52	$41.09	$15.14	$2.88	$77.49	$51.54
99203	Office Visit – New Patient E/M: 30 minutes	2022	$34.61	1.60	1.52	0.67	0.17	3.29	2.44
				$55.38	$52.61	$23.19	$5.88	$113.87	$84.45
		2021	$34.89	1.60	1.51	0.67	0.15	3.26	2.42
				$55.82	$52.68	$23.38	$5.23	$113.74	$84.43
		2020	$36.09	1.42	1.48	0.59	0.13	3.03	2.14
				$51.25	$53.41	$21.29	$4.69	$109.35	$77.23
		2019	$36.04	1.42	1.49	0.59	0.14	3.05	2.15
				$51.18	$53.70	$21.26	$5.05	$109.92	$77.49
99204	Office Visit – New Patient E/M: 45 minutes	2022	$34.61	2.60	2.06	1.11	0.24	4.90	3.95
				$89.99	$71.30	$38.42	$8.31	$169.59	$136.71
		2021	$34.89	2.60	2.04	1.11	0.23	4.87	3.94
				$90.71	$71.18	$38.73	$8.02	$169.91	$137.47
		2020	$36.09	2.43	1.98	1.01	0.22	4.63	3.66
				$87.70	$71.46	$36.45	$7.94	$167.10	$132.09
		2019	$36.04	2.43	1.99	1.00	0.21	4.63	3.64
				$87.58	$71.72	$36.04	$7.57	$166.87	$131.19
99205	Office Visit – New Patient E/M: 60 minutes	2022	$34.61	3.50	2.66	1.54	0.32	6.48	5.36
				$121.14	$92.06	$53.30	$11.08	$224.27	$185.51
		2021	$34.89	3.50	2.62	1.54	0.31	6.43	5.35
				$122.12	$91.41	$53.73	$10.82	$224.34	$186.66
		2020	$36.09	3.17	2.40	1.33	0.28	5.85	4.78
				$114.41	$86.62	$48.00	$10.11	$211.13	$172.51
		2019	$36.04	3.17	2.38	1.31	0.27	5.82	4.75
				$114.25	$85.78	$47.21	$9.73	$209.75	$171.19

CPT: Current Procedural Terminology. CY: Calendar Year. E/M: evaluation and management. MPFS CF: Medicare Physician Fee Schedule Conversion Factor. MP RVU: Malpractice Relative Value Units. PE RVU: Practice Expense Relative Value Units. WRVU: Work Relative Value Units.

Table 4. Office E/M -- Established Patient (CPT 99211-99215)

CPT Code	Description	CY	MPFS CF	WRVU	PE RVU – Non-Facility	PE RVU -- Facility	MP RVU	Total (Non-Facility)	Total (Facility)
99211	Office Visit – Established Patient E/M: 5 minutes	2022	$34.61	0.18	0.49	0.07	0.01	0.68	0.26
				$6.23	$16.96	$2.42	$0.35	$23.53	$9.00
		2021	$34.89	0.18	0.47	0.07	0.01	0.66	0.26
				$6.28	$16.40	$2.44	$0.35	$23.03	$9.07
		2020	$36.09	0.18	0.46	0.07	0.01	0.65	0.26
				$6.50	$16.60	$2.53	$0.36	$23.46	$9.38
		2019	$36.04	0.18	0.45	0.07	0.01	0.64	0.26
				$6.49	$16.22	$2.52	$0.36	$23.07	$9.37
99212	Office Visit – Established Patient E/M: 10 minutes	2022	$34.61	0.70	0.89	0.29	0.07	1.66	1.06
				$24.23	$30.80	$10.04	$2.42	$57.45	$36.69
		2021	$34.89	0.70	0.88	0.29	0.05	1.63	1.04
				$24.42	$30.70	$10.12	$1.74	$56.87	$36.29
		2020	$36.09	0.48	0.75	0.20	0.05	1.28	0.73
				$17.32	$27.07	$7.22	$1.80	$46.20	$26.35
		2019	$36.04	0.48	0.75	0.20	0.04	1.27	0.72
				$17.30	$27.03	$7.21	$1.44	$45.77	$25.95
99213	Office Visit – Established Patient E/M: 15 minutes	2022	$34.61	1.30	1.26	0.55	0.10	2.66	1.95
				$44.99	$43.61	$19.04	$3.46	$92.06	$67.49
		2021	$34.89	1.30	1.25	0.55	0.10	2.65	1.95
				$45.36	$43.61	$19.19	$3.49	$92.46	$68.04
		2020	$36.09	0.97	1.06	0.40	0.08	2.11	1.45
				$35.01	$38.26	$14.44	$2.89	$76.15	$52.33
		2019	$36.04	0.97	1.05	0.40	0.07	2.09	1.44
				$34.96	$37.84	$14.42	$2.52	$75.32	$51.90
99214	Office Visit – Established Patient E/M: 25 minutes	2022	$34.61	1.92	1.71	0.82	0.12	3.75	2.86
				$66.45	$59.18	$28.38	$4.15	$129.79	$98.98
		2021	$34.89	1.92	1.70	0.82	0.14	3.76	2.88
				$66.99	$59.31	$28.61	$4.88	$131.19	$100.48
		2020	$36.09	1.50	1.45	0.62	0.11	3.06	2.23
				$54.14	$52.33	$22.38	$3.97	$110.44	$80.48
		2019	$36.04	1.50	1.46	0.62	0.10	3.06	2.22
				$54.06	$52.62	$22.34	$3.60	$110.28	$80.01
99215	Office Visit – Established Patient E/M: 40 minutes	2022	$34.61	2.80	2.28	1.24	0.21	5.29	4.25
				$96.91	$78.91	$42.92	$7.27	$183.09	$147.09
		2021	$34.89	2.80	2.24	1.23	0.21	5.25	4.24
				$97.69	$78.15	$42.91	$7.33	$183.17	$147.93
		2020	$36.09	2.11	1.85	0.89	0.15	4.11	3.15
				$76.15	$66.77	$32.12	$5.41	$148.33	$113.68
		2019	$36.04	2.11	1.84	0.87	0.15	4.10	3.13
				$76.04	$66.31	$31.35	$5.41	$147.76	$112.81

CPT: Current Procedural Terminology. CY: Calendar Year. E/M: evaluation and management. MPFS CF: Medicare Physician Fee Schedule Conversion Factor. MP RVU: Malpractice Relative Value Units. PE RVU: Practice Expense Relative Value Units. WRVU: Work Relative Value Units.

Audio-Only Telemedicine Survey Report

Survey Development and Administration

Survey Development

A web-based REDCap survey was designed to assess information related to the following domains, as discussed and agreed upon with leadership from the OIC, WSTC, and HCA:

A. Enforcement requirements and compliance burden

Questions in this domain were categorized into three topics in reference to respondent perceptions of audio-only telemedicine laws: the Patient Consent Law, the Established Relationship Law, and the Facility Fee Law. The Patient Consent Law required that providers obtain verbal or written consent prior to initiating the first billable audio-only encounter. The Established Relationship Law required that patients have an in-person encounter within the last year with either the clinician providing audio-only services, a clinician in the same practice, or a clinician who referred the patient to the clinician providing audio-only services. The Facility Fee Law places restrictions on the ability for providers to bill facility fees for audio-only telemedicine.

First, a set of questions assessed respondents' perceptions of provider awareness of audio-only telemedicine laws, and how respondents educated providers about the laws (Topic: Provider Education). Second, a set of questions assessed whether respondents monitored for provider compliance with audio-only telemedicine laws, used methods for compliance monitoring, and implemented measures for non-compliance (questions about measures implemented for non-compliance were assessed for the Patient Consent Law but not Established Patient or Facility Fee Laws due to survey error) (Topic: Compliance Monitoring and Enforcement Practices). Third, a set of open-ended questions asked respondents to describe challenges or barriers to

monitoring for compliance with audio-only telemedicine laws (Topic: Compliance Monitoring Challenges).

B. Observations about fraud incidence and audits

Questions in this domain were categorized into three topics. First, a set of questions asked respondents to share their operational definition of fraud as it relates to audio-only telemedicine (Topic: Definitions of Fraud). Second, a set of questions assessed whether respondents monitored for fraud related to audio-only telemedicine laws and methods used (Topic: Fraud Monitoring).

A third set of questions asked respondents about whether they performed audits of providers and their perceptions of differences in the incidence of fraud related to three laws – Patient Consent Law, Established Patient Law, Facility Fee Law – between telemedicine-only and brick-and-mortar providers. Telemedicine-only providers were defined as those who provide real-time audio-only or audiovisual telemedicine services but not in-person services. This designation did not include individuals or groups that provide other telehealth services, such as remote monitoring, secure messaging, or other asynchronous telehealth services. Brick-and-mortar providers were defined as those who provide both in-person and telemedicine services (Topic: Fraud Comparisons by Provider Type). Questions for this topic also distinguished between behavioral health and physical health providers.

C. Differences in audio-only telemedicine services between telemedicine-only and brick-and-mortar providers

Questions in this domain were categorized into three topics. First, a set of questions asked

respondents whether telemedicine-only providers were included in networks or if providers subcontract with telemedicine-only provider companies. Other questions assessed respondents' perception of provider-level incentives to refer to telemedicine-only providers and of the impact of telemedicine-only providers on access to in-person care (Topic: Relationships with Telemedicine-Only Providers). Second, a set of questions assessed respondents' perception of the use of audio-only telemedicine services with brick-and-mortar providers and with telemedicine-only providers (Topic: Utilization Differences).

Third, a set of questions assessed respondents' perceptions of quality of care differences between telemedicine-only and brick-and-mortar providers (Topic: Quality differences). In assessing quality differences, questions adopted a framework consisting of five categories:

- Access to Care and Technology
- Patient Costs
- Equity
- Clinical Effectiveness
- Safety

This categorization approach drew from a National Quality Forum framework (NQF, 2021), which was adapted based on input from OIC, HCA, and WSTC partners as well as the VSSL team's prior experience and expertise.

D. Impact of Audio-Only Telemedicine on Value-Based Purchasing (VBP) arrangements or Value-Based Care (VBC) programs

Questions in this domain were categorized into three topics. First, a question asked respondents to share whether they specifically carved out audio-only telemedicine in measuring provider

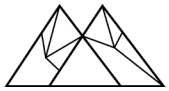
performance on quality measures (Topic: Quality Measurement). Second, an open-ended question asked respondents to share challenges they saw in integrating audio-only telemedicine into value-based purchasing arrangements (Topic: Challenges). Third, an open-ended question asked respondent to share opportunities they saw in integrating audio-only telemedicine into value-based purchasing arrangements (Topic: Opportunities).

Drafting

Initial drafting was based on surveys of insurance carriers available in the literature, insights from VSSL's systematic literature review of audio-only telemedicine, and priorities identified by state stakeholders. Where possible, questions were adapted from existing surveys related to telemedicine and other health care delivery and policy surveys. Question formats were based on the VSSL team's collective expertise designing surveys on health policy topics.

The survey was revised to ensure relevance to respondents and state stakeholders. In particular, after an initial drafting by VSSL, the survey was reviewed by OIC, WSTC, and HCA leadership for content and clarity. It was then distributed to potential respondents – Medicaid Managed Care Organizations (MCOs) and commercial carriers – for additional review and feedback, with emphasis on question comprehensibility and feasibility (that is, the ability for respondents to answer questions with available information and data). Potential respondents had four weeks to submit clarifying questions and feedback.

Feedback was subsequently incorporated into a final draft. At a meeting of the Association of Washington Healthcare Plans on January 25, 2023, VSSL presented the final survey version and provided opportunities for attendees to ask clarifying or logistical questions.



Survey Instrument

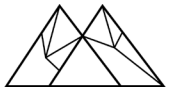
The final survey consisted of 26 core questions (5 free response, 12 multiple choice, 9 yes/no) presented to all respondents. Participants were presented with additional questions based on their responses to core questions. The complete survey can be found in **Appendix A**, with definitions of commonly used terms and laws in **Appendix B**.

Survey Sample

Respondents included 12 Medicaid MCO 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. Each carrier determined which individual(s) responded to the survey on behalf of the organization.

Survey Administration

The OIC emailed the survey to eligible carriers via web link and PDF on February 15, 2023. The survey was fielded over eight weeks, with three reminder emails sent over that period. The survey was closed on April 14, 2023.



Survey Results

All 12 respondents completed the survey (100% response rate). Six respondents reported having only commercial insurance enrollees, one respondent reported having only Medicaid MCO enrollees, and five respondents reported having both commercial and Medicaid MCO enrollees.

Of the 11 respondents with commercial enrollees, the average number of enrollees in Washington in the preceding 12 months was 143,377 (SD 194,139), ranging from 2,328 to 501,755 enrollees. Of the six respondents that had Medicaid MCO enrollees, the average number of enrollees in Washington in the preceding 12 months was 350,636 (SD 338,729), ranging from 35,020 to 1,015,776 enrollees.

To understand the settings of care and types of services where audio-only telemedicine was utilized, respondents were asked in which Affordable Care Act Essential Health Benefits they covered audio-only telemedicine services (Table 1).

Table 1. Essential Health Benefits Including Audio-Only Telemedicine Services

Essential Health Benefit	Respondents Covering Audio-Only Telemedicine (N)
Mental Health and Substance Use Disorder Services, including behavioral health treatment	10
Preventive and Wellness Services and Chronic Disease Management	9
Pediatric Services, including oral and vision care	8
Emergency Services	6
Maternity and Newborn Care	6
Hospitalization	5
Ambulatory Patient Services	4
Rehabilitation and Habilitative Services and Devices	4
Prescription Drugs	3

Laboratory Services	3
None	2

The essential health benefits for which audio-only telemedicine was most commonly covered were mental health and substance use disorder services, including behavioral health treatment; preventive and wellness services and chronic disease management; and pediatric services, including oral and vision care. Benefits for which audio-only telemedicine was least frequently covered included prescription drugs and laboratory services. Two respondents reported covering audio-only telemedicine services in none of the ten essential health benefits.

A. Enforcement requirements and compliance burden

Provider education

A number of respondents perceived that providers in their networks were *Moderately Familiar* with all three laws (N=5 for Patient Consent; N=7 for Established Relationship and Facility Fee), with most familiarity with the Patient Consent Law (N=4 expressing that providers in their networks were *Extremely Familiar* with that law).

Ten respondents made providers aware of the Patient Consent and Established Relationship Laws while two did not. Of the ten respondents who did, education was most often provided via *Written Contracts* (N=8, for Patient Consent and Established Relationship) and *Email* (N=4 Patient Consent and N=3 for Established Relationship).

Eight respondents made providers aware of the Facility Fee Law while four did not. Of the eight who did, education was most often provided via *Written Contracts* (N=4) or *Email* (N=3). Respondents were able to report multiple methods of educating providers about audio-only telemedicine laws.

Compliance monitoring and enforcement practices

Five respondents monitored for compliance with the Patient Consent Law, three monitored for compliance with the Established Relationship Law, and six monitored for compliance with the Facility Fee Law. Five respondents reported they did not monitor for compliance with any of the three laws.

Overall, respondents found that monitoring for compliance with the audio-only telemedicine laws was difficult. Four respondents reported monitoring providers for compliance with the Patient Consent Law was of *neutral* difficulty, while eight respondents found it *difficult* or *very difficult* and no respondents found it *easy* or *very easy*.

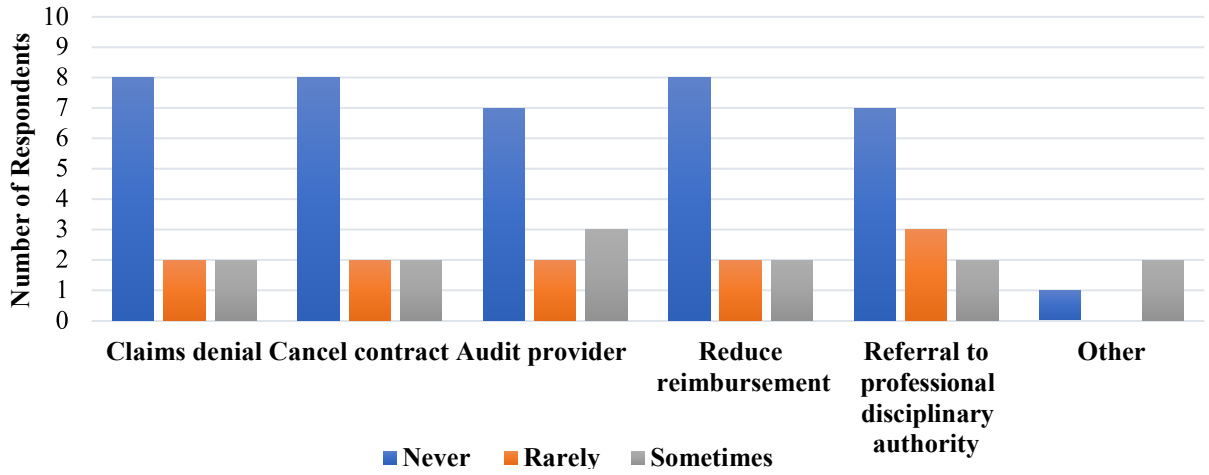
Five respondents reported monitoring providers for compliance with the Established Relationship Law was of *neutral* difficulty, while seven respondents found it *difficult* or *very difficult* and no respondents found it *easy* or *very easy*. Six respondents reported monitoring providers for compliance with the Facility Fee Law was *neutral* difficulty, five reported that it was *difficult* or *very difficult*, and one respondent reported it to be *easy*.

Of respondents who reported monitoring for compliance, the most common method was through *Contract Expectations* (N=3 for all three laws). Additional, but less frequently cited methods included *Audits*, *Claims Adjudication*, and *Other* methods identified via free response, which included monitoring for and responding to member complaints and case review.

The measures implemented in response to non-compliance with the Patient Consent Law varied across respondents. Four respondents did not report implementing any measures when they found providers to be non-compliant. The most common enforcement measure was to audit providers, which three respondents reported implementing *sometimes* and two reported implementing *rarely*. The second most common enforcement measure was to refer providers to a professional disciplinary authority, which two respondents reported implementing *sometimes* and three reported implementing *rarely.* Eight respondents reported *never* implementing Claims Denial, Canceling Contracts, or Reducing Reimbursement in response to non-compliance. Two respondents reported *Other* enforcement measures *sometimes*, and included amending contracts and requiring corrective action plans as example measures (Figure 1).

Compliance monitoring challenges

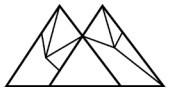
Figure 1. Enforcement Measures for Non-Compliance with Patient Consent Law



Overall, respondents reported that monitoring for compliance was difficult. Five respondents detailed challenges through a free response question, with entries focused on several themes (Table 2).

Table 2. Challenges Monitoring for Compliance, by Audio-Only Telemedicine Law			
Challenge/Barrier	**Patient Consent**	**Established Relationship**	**Facility Fee**
Lack of Automated Systems	x	x	x
Labor Intensive Process	x		x
Taken Care of Through Contracting	x	x	x
No Requirement to Monitor	x		
See **Appendix C** for example quotes for each of the identified issues.			

Lack of Automated Systems. Responses highlighted that large scale compliance monitoring would require systematic claims review, for which there were no automated processes in place to survey claims for compliance with audio-only telemedicine laws.



Labor Intensive Process. Responses highlighted that monitoring for compliance would require manual review of claims and records, which would be a time and labor-intensive process for respondents and providers.

Taken Care of Through Contracting. Responses highlighted that respondents included compliance expectations (that providers would comply with audio-only telemedicine laws in contracts, and that it would be challenging to monitor for compliance beyond this practice.

No Requirement to Monitor. Responses highlighted the absence of regulatory requirement for respondents to take action in response to provider non-compliance with audio-only telemedicine laws.

B. Observations about fraud incidence and audits

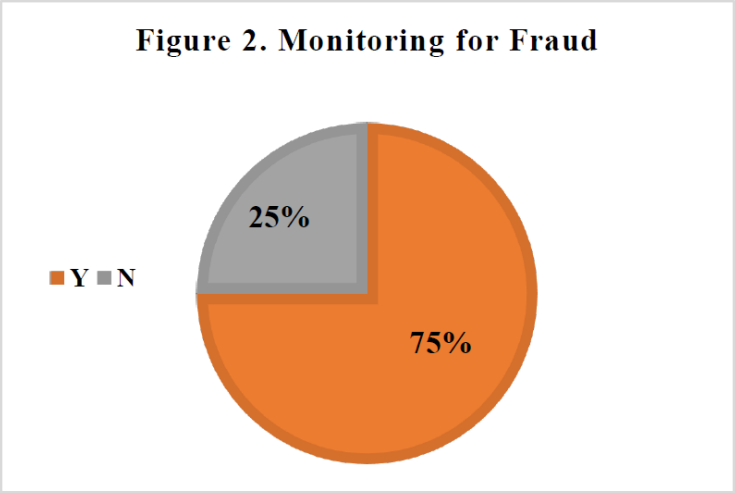
Definitions of fraud

All definitions of fraud provided by respondents involved the following elements:

- Intentional deception, misrepresentation, or concealing facts, and
- Knowledge that misrepresentation could result in benefit to self or to another actor

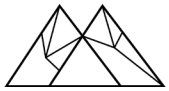
One representative definition of fraud provided by respondents was as follows: “fraud is the intentional deception or misrepresentation made by a person with the knowledge that the deception could result in some unauthorized benefit to himself or some other person. It includes any act that constitutes fraud under applicable federal or state law.”

Fraud monitoring



Three respondents (25% of respondents) reported no established method for monitoring for fraud (Figure 2). Of the nine (75% of respondents) who did report having fraud monitoring methods, the most commonly reported was *Individual Case Review* (Table 3). Respondent quotes outlining *Other* methods for monitoring for fraud can be found in **Appendix D**.

Table 3. Methods for Monitoring for Fraud	
Fraud Monitoring Method	**Number of Respondents Using this Method**
Individual Case Review	7
Volume Trigger From Code	5
Claims Review	5
"Other" Internally Guided Processes	4
Spot Checks	2



Fraud comparisons by provider type

Patient Consent Law

- Behavioral Health Telemedicine-only Providers: Seven respondents reported not performing an audit for fraud among telemedicine-only providers. Among the other five respondents, two respondents perceived fraud occurring *sometimes* while three respondents perceived fraud occurring *rarely* or *never.*

- Behavioral Health Brick-and-Mortar Providers: Six respondents reported not performing audits for fraud among brick-and-mortar providers. Among the other six respondents, three respondents perceived fraud occurring *sometimes* while three respondents perceived fraud occurring *rarely* or *never.*

- Physical Health Telemedicine-only Providers: Seven respondents reported not performing audits for fraud among telemedicine-only providers. Among the other five respondents, two respondents perceived fraud occurring *sometimes* while the other three respondents perceived fraud occurring *rarely* or *never*.

- Physical Health Brick-and-Mortar Providers: Seven respondents reported not performing audits for fraud among brick-and-mortar providers. Among the other five respondents, two respondents perceived fraud occurring *sometimes* while the other three respondents perceived fraud occurring *rarely* or *never*.

Established Patient Law

- Behavioral Health Telemedicine-only Providers: Eight respondents reported not performing an audit for fraud among telemedicine-only providers. Among the other four respondents, one respondent perceived fraud occurring *sometimes* while three respondents perceived fraud occurring *rarely* or *never.*

- Behavioral Health Brick-and-Mortar Providers: Seven respondents reported not performing audits for fraud among brick-and-mortar providers. Among the other five respondents, one respondent perceived fraud occurring *sometimes* while four respondents perceived fraud occurring *rarely* or *never.*

- Physical Health Telemedicine-only Providers: Eight respondents reported not performing audits for fraud among telemedicine-only providers. Among the other four respondents, one respondent perceived fraud occurring *sometimes* while three respondents perceived fraud occurring *rarely* or *never.*

- Physical Health Brick-and-Mortar Providers: Eight respondents reported not performing audits for fraud among brick-and-mortar providers. Among the other four respondents, all perceived fraud occurring *rarely* or *never*.

Facility Fee Law

- Behavioral Health Telemedicine-only Providers: Seven respondents reported not performing an audit for fraud among telemedicine-only providers. Among the other five respondents, one respondent perceived fraud occurring *often*, one respondent perceived fraud occurring *sometimes*, and three respondents perceived fraud occurring *rarely* or

never.

- Behavioral Health Brick-and-Mortar Providers: Six respondents reported not performing audits for fraud among brick-and-mortar providers. Among the other six respondents, one respondent perceived fraud occurring *often*, one respondent perceived fraud occurring *sometimes*, and four respondents perceived fraud occurring *rarely* or *never.*

- Physical Health Telemedicine-only Providers: Eight respondents reported not performing audits for fraud among telemedicine-only providers. Among the other four respondents, one respondent perceived fraud occurring *sometimes* while three respondents perceived fraud occurring *rarely* or *never.*

- Physical Health Brick-and-Mortar Providers: Seven respondents reported not performing audits for fraud among brick-and-mortar providers. Among the other five respondents, one respondent perceived fraud occurring *sometimes* while four respondents perceived fraud occurring *rarely* or *never.*

C. Differences in audio-only telemedicine services between telemedicine-only providers and brick-and-mortar providers

Relationships with telemedicine-only providers

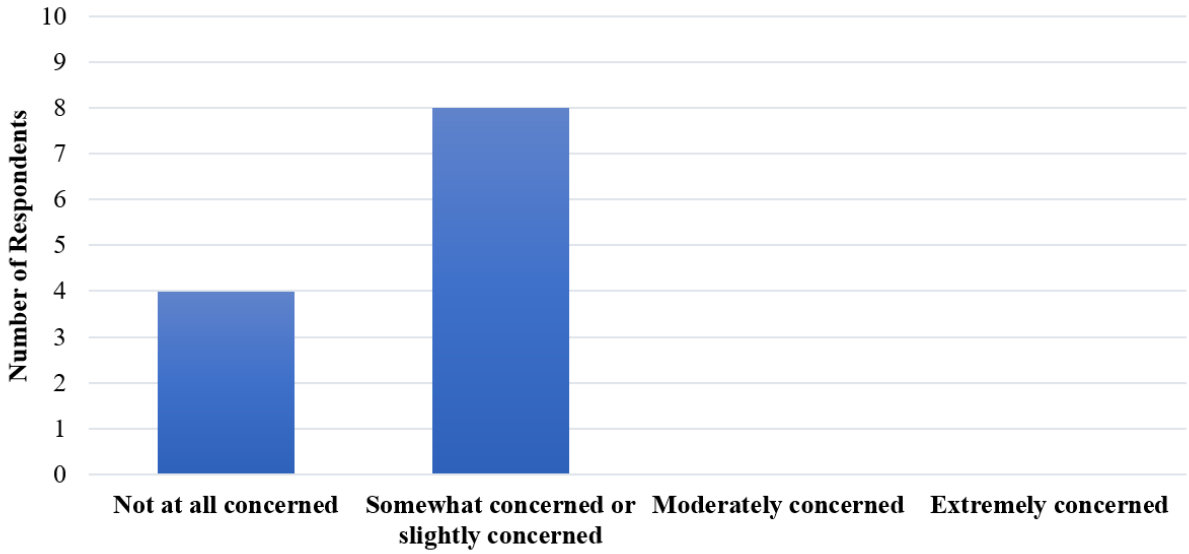
Eleven out of 12 respondents reported having telemedicine-only providers included in their networks. Five respondents knew that provider organizations in their network had subcontracts with telemedicine-only provider companies while another five respondents did not know, and

two reported having no subcontracts with telemedicine-only provider companies.

Of the five respondents reporting telemedicine-only provider company subcontracts, four respondents knew that telemedicine-only provider companies were providing real-time audio-only services while one respondent did not know. None of the respondents reported knowledge of practitioners receiving incentives from telemedicine-only provider companies.

Eight respondents reported they were either *somewhat concerned or slightly concerned* that there would be changes in access for in-person services driven by (1) increased provider preference for delivering healthcare via telemedicine or (2) provider preference for employment with telemedicine-only provider companies (Figure 3). In contrast, four respondents reported they were *not at all concerned* with changes in access for in-person services. No respondents reported being *moderately concerned* or *extremely concerned*.

Figure 3. Concern About Changes in Access to In-Person Care

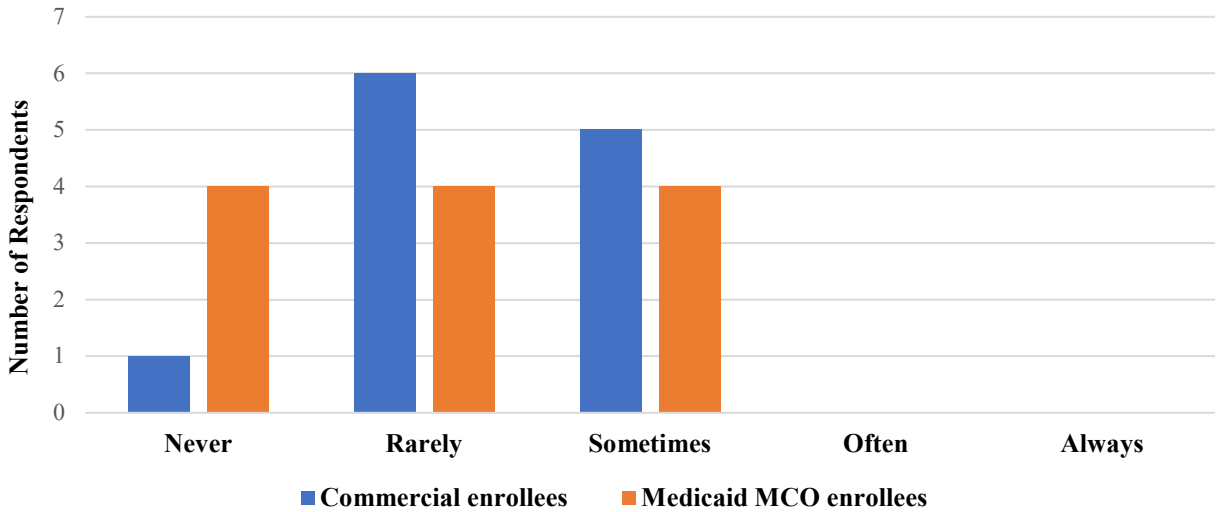


Utilization differences

No respondents reported that that their enrollees *often* or *always* receive audio-only telemedicine services from telemedicine-only providers. Overall, respondents reported similar perceived frequency of audio-only telemedicine services by telemedicine-only providers among commercial and Medicaid MCO enrollees.

Eleven respondents reported that their commercial enrollees *rarely* or *sometimes* received audio-only telemedicine services from telemedicine-only providers. In comparison, eight respondents reported that their Medicaid enrollees *rarely* or *sometimes* received audio-only telemedicine care from such providers. No respondents perceived that their enrollees *often* or *always* received audio-only telemedicine services that way (Figure 4).

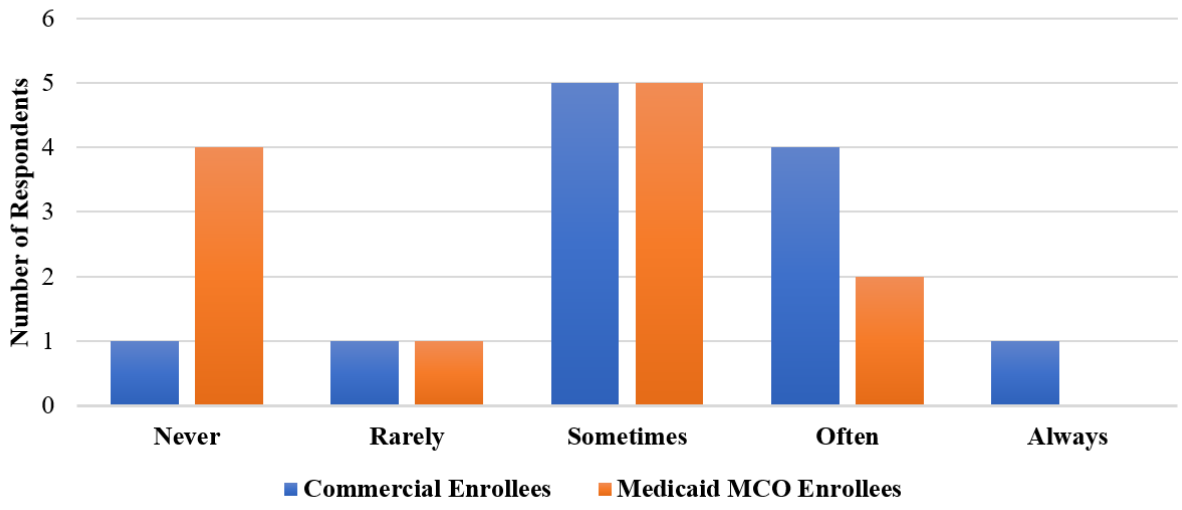
Figure 4. Frequency of Audio-only Telemedicine Services from Telemedicine-Only Providers



Five respondents reported that their commercial enrollees received audio-only telemedicine care from brick-and-mortar providers *often* or *always*, while six respondents reported this occurring

rarely or *sometimes*. In contrast, five respondents reported that their Medicaid MCO enrollees *sometimes* received audio-only telemedicine services from brick-and-mortar providers; two respondents reported that Medicaid MCO enrollees *often* received audio-only telemedicine services from brick-and-mortar providers. No respondents reported this *always* occurring for Medicaid MCO enrollees (Figure 5).

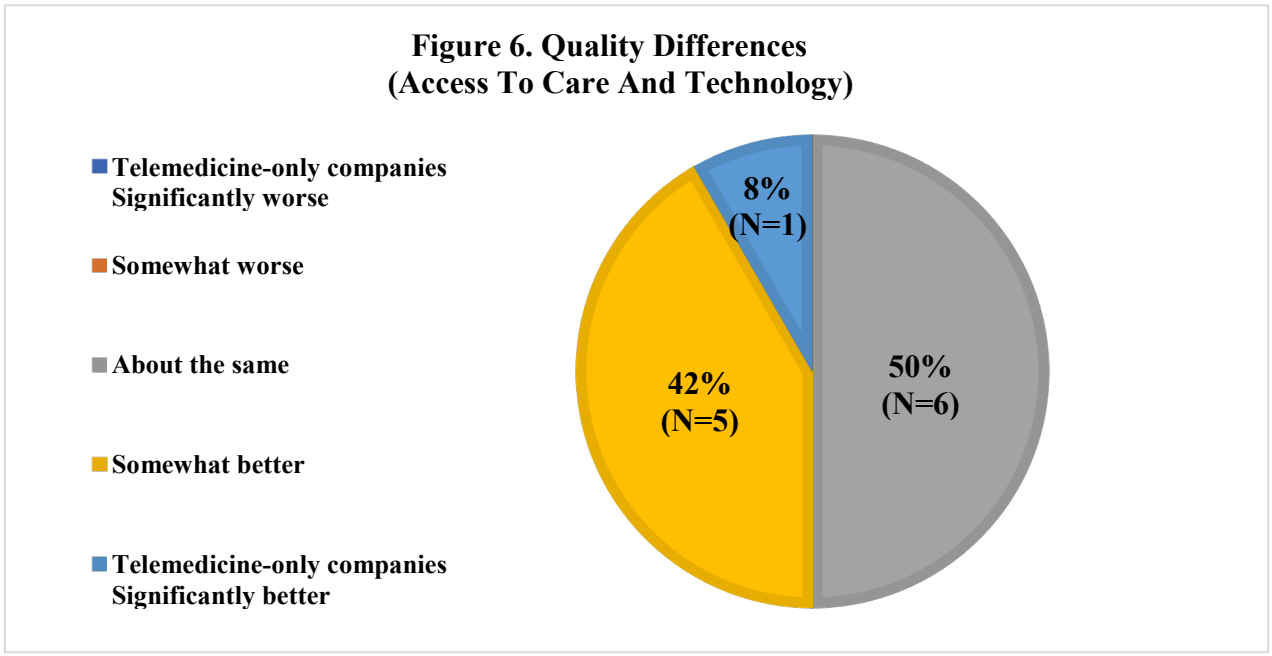
Figure 5. Frequency of Audio-only Telemedicine Services from Brick-and-Mortar Providers



Quality differences

Access to care and technology

Six respondents believed access to care and technology for audio-only telemedicine services was *about the same* between telemedicine-only and brick-and-mortar providers, five respondents believed it was *somewhat better* with telemedicine-only versus brick-and-mortar providers, and one respondent believed it was *significantly better* with telemedicine-only providers (Figure 6).



Patient costs

Ten of the twelve respondents perceived that patient cost of audio-only telemedicine services were *about the same* between the two types of providers. One respondent believed that patient costs were *somewhat better* and another respondent perceived them to be *significantly better* with telemedicine-only providers compared with brick-and-mortar providers.

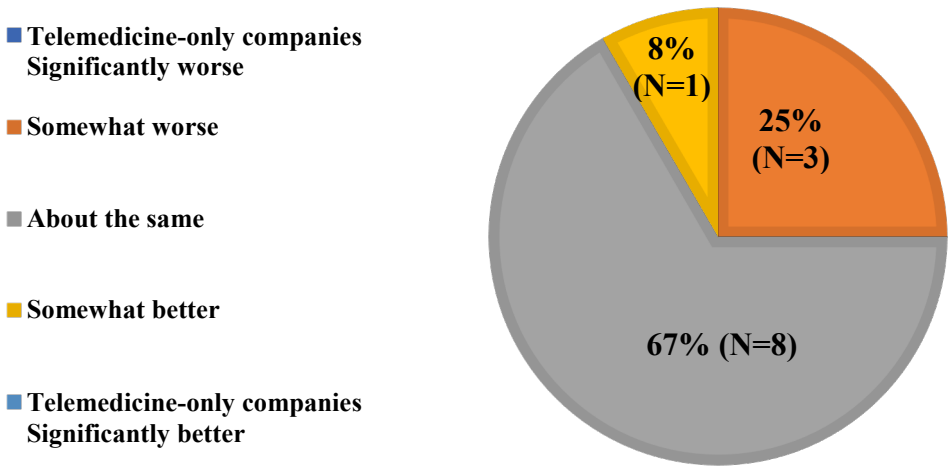
Equity

Ten of the twelve respondents perceived that equity was *about the same* for audio-only telemedicine services between the two provider types. One respondent perceived that equity was *somewhat worse* and one respondent thought equity was *somewhat better* in care delivered by telemedicine-only versus brick-and-mortar providers.

Clinical effectiveness

Eight respondents perceived clinical effectiveness to be *about the same* between telemedicine-only and brick-and-mortar providers for audio-only telemedicine services. Three respondents believed clinical effectiveness was *somewhat worse* with telemedicine-only providers, and one respondent believed it to be *somewhat better* with telemedicine-only providers compared to brick-and-mortar providers (Figure 7).

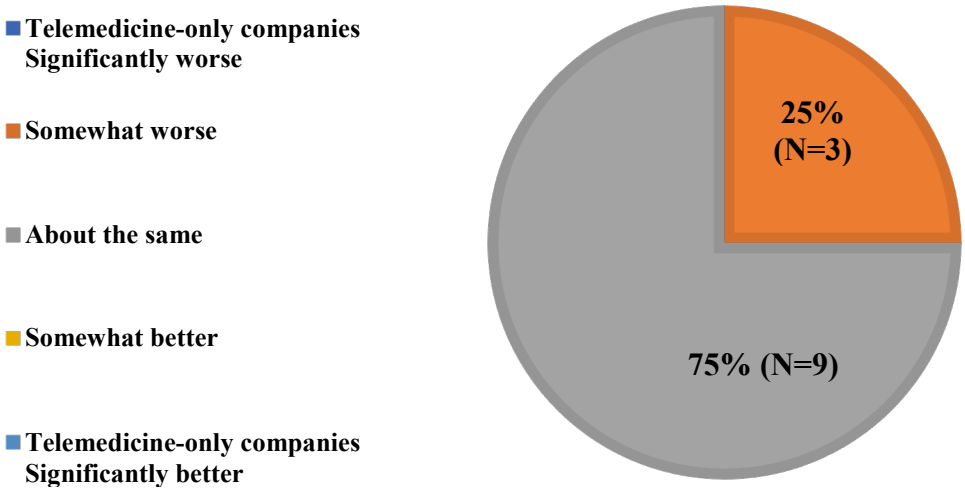
Figure 7. Quality Differences (Clinical Effectiveness)



Safety

Nine respondents believed safety of care in audio-only telemedicine services was *about the same* between telemedicine and brick-and-mortar providers. Three respondents believed safety to be *somewhat worse* with telemedicine-only providers compared to brick-and-mortar providers (Figure 8).

Figure 8. Quality Differences (Safety)



D. Impact of audio-only telemedicine on VBP arrangements or VBC programs

Quality measurement

All 12 respondents reported that they did not specifically carve out performance of audio-only telemedicine services when assessing quality performance on quality measures.

Challenges

Six respondents shared challenges that they foresaw or experienced integrating audio-only telemedicine into VBP arrangements or VBC programs. Challenges focused on the following issues:

- Ensuring appropriate billing codes and modifiers
- Lack of a physical exam component in audio-only telemedicine
- Challenges with risk adjustment based on audio-only telemedicine
- Perceived limited use of telemedicine in closing quality care gaps

- Varying provider capacity to use audio-only telemedicine
- Varying patient preference for using audio-only telemedicine
- Challenges with patient attribution to clinic based on audio-only telemedicine use

Opportunities

Five respondents shared opportunities that they saw integrating audio-only telemedicine into VBP arrangements or VBC programs. Opportunities focused on the following:

- Facilitating improved access to care
- Reducing cost
- Improving quality of care

Respondents' quotes about perceived challenges and opportunities for integrating audio-only telemedicine into VBP arrangements or VBC programs can be found in **Appendix E**.

Limitations

Although all eligible commercial carriers and Medicaid MCOs responded, survey results were limited to carrier experiences and sample of available carriers. Based on policy goals, future work should consider patient and provider experiences and broader samples of carriers. Additionally, the relatively small number of carriers precluded additional analyses, such as those quantitatively comparing results by carrier characteristics (e.g., commercial versus Medicaid MCOs) and provider characteristics (e.g., behavioral health versus physical health; telemedicine-only versus brick-and-mortar). Moreover, as a survey analysis, findings are limited to perceptions and self-reported information as opposed to directly observed or obtained clinical

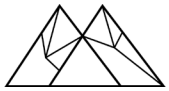
and administrative data. Nonetheless, the survey is timely and yields insights as the first of its kind in Washington representing carriers through which many Washingtonians receive audio-only telemedicine services in the state.

Conclusion

This survey analysis has a number of take-aways. First, it suggests that audio-only telemedicine services were covered for a wide range of services, including mental health and substance use disorder services, including behavioral health treatment; preventive and wellness services and chronic disease management; pediatric services, including oral and vision care; emergency services; and maternity and newborn care.

Second, carriers perceived that providers were aware of audio-only telemedicine laws, particularly the Patient Consent Law, and due to a number of factors, very infrequently monitored providers for compliance with such laws. Carriers reported using provider education and contracts to convey expectations about compliance with such laws.

Third, in contrast to compliance, respondents consistently had a program definition of fraud, and most reported methods (most commonly individual case review) for monitoring fraud, which they did not perceive to significantly differ between behavioral and physical health providers, or brick-and-mortar and telemedicine-only providers. Actual fraud audits occurred infrequently: many carriers reported never doing so, and rarely did carriers perceived fraud occurring more than "sometimes" (in two instances, a carrier perceived fraud occurring "often" – for behavioral health brick-and-mortar and telemedicine-only providers).



Fourth, carrier perceptions of quality of audio-only telemedicine services varied in several respects for telemedicine-only versus brick-and-mortar providers. In particular, compared to brick-and-mortar providers, telemedicine-only providers were felt to improve access to audio- only telemedicine services, but potentially at the risk of lower safety. There were also mixed perceptions about clinical effectiveness, equity, and patient costs by provider type.

Fifth, carriers reported both perceived challenges and opportunities integrating audio-only telemedicine services into value-based purchasing arrangements or value-based care programs.

Collectively, these results highlight several policy implications. For one, findings suggest policymakers would need to enact new policies or approaches to expand monitoring for provider compliance or conducting fraud audits related to audio-only telemedicine. Efforts to do so would need to address barriers highlighted by carriers, which included the lack of automated systems; labor intensive nature of the work; belief that compliance is sufficiently addressed through contract expectations; and lack of a statutory requirement to monitor for non-compliance and fraud. Under existing requirements, structures, and processes, carriers did neither systematically or at scale.

For another, survey findings underscore potential differences between telemedicine-only and brick-and-mortar providers. Future policy evaluation is urgently needed to quantitatively assess the veracity of carriers' perceptions, and evaluate whether telemedicine-only and brick-and-mortar providers differ in access, patient costs, equity, clinical effectiveness, and safety – and should differences exist, to what degree and in what direction. It would be challenging to enact

permanent audio-only telemedicine policies one way or another, and possess confidence about their effects on patients, without such data.

The potential for integrating audio-only telemedicine into value-based purchasing and care is yet another policy implication. Opportunities articulated by carriers – improved access and quality and reduced costs – remain highly relevant for policymakers, and are the fundamental goals of value-based arrangements. Strong potential alignment can exist between value-based arrangements and audio-only telemedicine services.

Conversely, the challenges highlighted by carriers are either time-limited and/or surmountable (e.g., ensuring appropriate billing codes and modifiers) or, serendipitously, reflect core precepts of value-based care. For instance, carriers expressed concerns that audio-only telemedicine lacked a physical exam component and that providers and patients could vary in their capacity and preferences for using audio-only telemedicine services. Fortunately, these are features – not bugs – in value-based arrangements. Specifically, value-based programs aspire to provide patients and providers flexibility – safeguarded by accountability for outcomes – in ways that could permit audio-only telemedicine to support desirable variation in capacity, use, preference, and care components. Likely challenges are not in fundamental misalignment as much as in ensuring appropriate program design (e.g., data, financial incentives, quality measurement, outcomes accountability).

References

1. National Quality Forum. Rural Telehealth and Healthcare System Readiness Measurement Framework, Final Report. https://www.qualityforum.org/Publications/2021/11/Rural_Telehealth_and_Healthcare_Syste

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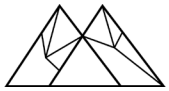


Appendices

If you have any questions or issues arise when taking the survey, please contact hscollective@uw.edu

Thank you!

Introduction

Section 8 in ESHB 1196 directs the Washington State Office of the Insurance Commissioner (OIC), in collaboration with the Washington State Telehealth Collaborative (WSTC) and the Health Care Authority (HCA), to study and make recommendations related to audio-only telemedicine. The Value & Systems Science Lab (VSSL) at the University of Washington School of Medicine was engaged to assist the OIC in this work.

One part of that work involves using a web-based survey to gather data from commercial carriers and Medicaid managed care organizations about information in the following domains:

- Enforcement requirements and compliance burden
- Observations about fraud incidence and audits
- Differences in audio-only telemedicine services between telemedicine-only providers and brick and mortar providers
- Impact of audio only telemedicine on Value-Based Payment (VBP) arrangements or Value-Based Care (VBC) programs

We acknowledge that compliance with the audio-only telemedicine policies described in this survey is a shared responsibility with the state, health plans, and providers. Therefore, responses related to compliance and fraud monitoring activities will not be treated as an indicator of compliance with statutory or regulatory requirements.

We understand that several carriers offer coverage in the commercial market and contract as Medicaid Managed Care organizations. To ensure that the survey captures the most accurate information, we request that staff from both of the lines of business participate in developing survey responses. There will also be free text response fields at the end of each section to provide an opportunity to explain any nuance between these lines of business.

All survey responses will be de-identified and utilized for aggregate analyses.

Definitions (alphabetically listed)

Behavioral health-only providers: those primarily providing substance use or mental health treatment services.
Brick and mortar providers: those who serve patients both in person and via telemedicine.
Compliance: provider adherence to any telemedicine laws pursuant to RCW 48.43.735 and related to patient consent, established relationship, and facility fees. Failure to adhere to these laws results in non-compliance.
Enforcement: activities that carriers or health plans undertake to ensure provider compliance.
Physical health providers: those caring for physical medical conditions. Physical health providers may also provide substance and mental health treatment services, however, in the context of also providing for physical health conditions.
Telemedicine-only providers: those who provide real-time audio-only or audiovisual telemedicine for medical services, but do not provide in-person services (E.g. Teladoc). This does not include individuals or groups that provide other telehealth services, such as remote monitoring, secure messaging, or other asynchronous telehealth services.

Laws

WAC 284-170-433 "Patient consent" law requires that providers must obtain verbal or written consent prior to the initiation of the first billable audio-only encounter and may constitute as consent to such encounters for a period of up to 12 months. Consent can be revoked by the patient at any time.

RCW 48.47.735 "Established relationship" law requires that providers have access to sufficient health records to ensure safe, effective, and appropriate care services. Additionally, this law requires that the patient have a qualifying encounter to establish a relationship prior to receiving billable audio-only services. A qualifying encounter means an in-person appointment or a real-time interactive appointment using both audio and video technology. This encounter can be with either the clinician providing audio-only services, a clinician in the same practice, or the clinician referring to the provider delivering audio-only services. For health care services included in the essential health benefits category of mental health and substance use disorder services, including behavioral health treatment, the patient must have had at least one qualifying encounter in the past three years. For all other health care services billable by audio-only telemedicine, the qualifying encounter must have been within the past two years.

RCW 48.47.735 and RCW 70.41.530 "Facility Fee" law governs when a facility fee can be associated with an audio-only telemedicine visit. It states that a facility fee is solely based on the originating site, which is the physical location of a patient receiving health care services through telemedicine, at a qualifying health care facility. However, a hospital that is an originating site or distant site for audio-only telemedicine may not charge a facility fee.

Section I: Background Information

We acknowledge that implementation of the audio-only telemedicine policies described in this survey is a shared responsibility with the state, health plans, and providers. Therefore, responses related to compliance and fraud monitoring activities will not be treated as an indicator of compliance with statutory or regulatory requirements.

We understand that several carriers offer coverage in the commercial market and contract as Medicaid Managed Care organizations. To ensure that the survey captures the most accurate information, we request that staff from both of the lines of business participate in developing survey responses. There will also be free text response fields at the end of each section to provide an opportunity to explain any nuance between these lines of business.

All survey responses will be de-identified and utilized for aggregate analyses.

1. How many enrollees were enrolled in your plans (Commercial, PEBB/SEBB and Medicaid Managed Care contracts) in Washington state in the past 12 months? Enter 'NA' if not applicable.

Commercial enrollees: _____

Medicaid MCO enrollees: _____

2. Based on claims data since January 1, 2022, in which of these Essential Health Benefits, as defined by RCW 48.43.005, are audio-only services being delivered?

Check all that apply:

- ☐ Ambulatory patient services;
- ☐ Emergency services;
- ☐ Hospitalization;
- ☐ Maternity and newborn care;
- ☐ Mental health and substance use disorder services, including behavioral health treatment;
- ☐ Prescription drugs;
- ☐ Rehabilitative and habilitative services and devices;
- ☐ Laboratory services;
- ☐ Preventive and wellness services and chronic disease management;
- ☐ Pediatric services, including oral and vision care
- ☐ None

For carriers that offer coverage in both the commercial market and contract as Medicaid MCOs:

Based on the questions from this section, please provide any additional information that may vary between the two business lines.

_____

SECTION II: Enforcement requirements & compliance burden

We acknowledge that implementation of the audio-only telemedicine policies described in this survey is a shared responsibility with the state, health plans, and providers. Therefore, responses related to compliance and fraud monitoring activities will not be treated as an indicator of compliance with statutory or regulatory requirements.

We understand that several carriers offer coverage in the commercial market and contract as Medicaid Managed Care organizations. To ensure that the survey captures the most accurate information, we request that staff from both of the lines of business participate in developing survey responses. There will also be free text response fields at the end of each section to provide an opportunity to explain any nuance between these lines of business.

All survey responses will be de-identified and utilized for aggregate analyses.

3. How familiar do you believe providers in your network are with the following laws:

	Not at all familiar	Slightly familiar	Somewhat familiar	Moderately familiar	Extremely familiar
Patient Consent	○	○	○	○	○
Established Relationship	○	○	○	○	○
Facility Fee	○	○	○	○	○

4. How difficult is it to monitor providers for compliance with the following laws?

	Very Easy	Easy	Neutral	Difficult	Very Difficult
Patient Consent	○	○	○	○	○
Established Relationship	○	○	○	○	○
Facility Fee	○	○	○	○	○

5. In the last 12-months, did you make your providers aware of the Patient Consent law?

○ Yes
○ No

5a. In what format was the education provided? Check all that apply:

☐ Web-based (e.g. CME training)
☐ E-mail
☐ Mail
☐ In-person education
☐ Written in contracts
☐ Other provider legal documents
☐ Other

You selected 'Other provider legal documents' above, please specify here: _____

You selected 'Other' above, please specify here: _____

6. In the lasts 12-months, did you make your providers aware of the Established Relationship law?

○ Yes
○ No

6a. In what format was the education provided? Check all that apply:

☐ Web-based (e.g. CME training)
☐ E-mail
☐ Mail
☐ In-person education
☐ Written in contracts
☐ Other provider legal documents
☐ Other

You selected 'Other provider legal documents' above, please specify here: _____

You selected 'Other' above, please specify here: _____

7. In the lasts 12-months, did you make your providers aware of the Facility Fee law?

○ Yes
○ No

7a. In what format was the education provided? Check all that apply:

☐ Web-based (e.g. CME training)
☐ E-mail
☐ Mail
☐ In-person education
☐ Written in contracts
☐ Other provider legal documents
☐ Other

You selected 'Other provider legal documents' above, please specify here:	_____
You selected 'Other' above, please specify here:	_____
8. In the last 12-months, did you monitor for compliance with the Patient Consent law?	○ Yes ○ No
8a. How did you monitor? Check all that apply:	☐ Claims adjudication ☐ Prior authorization ☐ Contract expectations ☐ Audits ☐ Other
You selected 'Audits' above, please specify here:	_____
You selected 'Other' above, please specify here:	_____
9. In the last 12-months, did you monitor for compliance with the Established Relationship law?	○ Yes ○ No
9a. How did you monitor? Check all that apply:	☐ Claims adjudication ☐ Prior authorization ☐ Contract expectations ☐ Audits ☐ Other
You selected 'Audits' above, please specify here:	_____
You selected 'Other' above, please specify here:	_____
10. In the last 12-months, did you monitor for compliance with the Facility Fee law?	○ Yes ○ No
10a. How did you monitor? Check all that apply:	☐ Claims adjudication ☐ Prior authorization ☐ Contract expectations ☐ Audits ☐ Other
You selected 'Audits' above, please specify here:	_____
You selected 'Other' above, please specify here:	_____

11. What challenges, if any, have you encountered in monitoring for compliance with audio-only telemedicine laws (e.g. staffing constraints on your team, difficulty to detect using current methods and processes, etc.)?

Patient Consent:

_____

Established Relationship:

_____

Facility Fee:

_____

12. How often do you perceive you implement the following measure(s) in response to non-compliance with the Patient Consent law?

	Never	Rarely	Sometimes	Often	Always
Claims denial	○	○	○	○	○
Cancel contract	○	○	○	○	○
Audit provider	○	○	○	○	○
Reduce reimbursement	○	○	○	○	○
Referral to professional disciplinary authority	○	○	○	○	○
Other, specify below	○	○	○	○	○

You selected 'Other' above, please specify here: _____

For carriers that offer coverage in both the commercial market and contract as Medicaid MCOs:

_____

Based on the questions from this section, please provide any additional information that may vary between the two business lines.

SECTION III: Observations about fraud incidence and audits

We acknowledge that implementation of the audio-only telemedicine policies described in this survey is a shared responsibility with the state, health plans, and providers. Therefore, responses related to compliance and fraud monitoring activities will not be treated as an indicator of compliance with statutory or regulatory requirements.

We understand that several carriers offer coverage in the commercial market and contract as Medicaid Managed Care organizations. To ensure that the survey captures the most accurate information, we request that staff from both of the lines of business participate in developing survey responses. There will also be free text response fields at the end of each section to provide an opportunity to explain any nuance between these lines of business.

All survey responses will be de-identified and utilized for aggregate analyses.

ESHB 1196 requires that "preliminary information regarding whether requiring reimbursement for audio-only telemedicine has affected the incidence of fraud."

13. How have you defined "fraud" as it relates to audio-only telemedicine?

_____

14. How do you monitor for fraud and abuse in audio-only telemedicine? Please check all that apply.

- ☐ Volume trigger from code
- ☐ Spot checks
- ☐ Individual case review
- ☐ Claims review process
- ☐ Other internally guided processes that have been identified by leadership
- ☐ No established method

Please describe:

_____

15. Among these providers, how often do you perceive fraud related to the Patient Consent law is occurring in audited audio-only telemedicine claims?

	Never	Rarely	Sometimes	Often	Always	No audit performed
Telemedicine only, Behavioral Health providers	○	○	○	○	○	○
Telemedicine only, Physical Health providers	○	○	○	○	○	○
Brick and mortar, Behavioral Health providers	○	○	○	○	○	○
Brick and mortar, Physical Health providers	○	○	○	○	○	○

16. Among these providers, how often do you perceive fraud related to the Established Relationship law is occurring in audited audio-only telemedicine claims?

	Never	Rarely	Sometimes	Often	Always	No audit performed
Telemedicine only, Behavioral Health providers	○	○	○	○	○	○
Telemedicine only, Physical Health providers	○	○	○	○	○	○
Brick and mortar, Behavioral Health providers	○	○	○	○	○	○
Brick and mortar, Physical Health providers	○	○	○	○	○	○

17. Among these providers, how often do you perceive fraud related to the Facility Fee law is occurring in audited audio-only telemedicine claims?

	Never	Rarely	Sometimes	Often	Always	No audit performed
Telemedicine only, Behavioral Health providers	○	○	○	○	○	○
Telemedicine only, Physical Health providers	○	○	○	○	○	○
Brick and mortar, Behavioral Health providers	○	○	○	○	○	○
Brick and mortar, Physical Health providers	○	○	○	○	○	○

For carriers that offer coverage in both the commercial market and contract as Medicaid MCOs:

Based on the questions from this section, please provide any additional information that may vary between the two business lines.

SECTION IV: Differences in audio-only telemedicine services between telemedicine-only providers and brick and mortar providers

The following questions inquire about different types of telemedicine services provided by 1) telemedicine-only providers or 2) brick and mortar providers.

We understand that several carriers offer coverage in the commercial market and contract as Medicaid Managed Care organizations. To ensure that the survey captures the most accurate information, we request that staff from both of the lines of business participate in developing survey responses. There will also be free text response fields at the end of each section to provide an opportunity to explain any nuance between these lines of business.

18. Are telemedicine-only providers included in your network?
○ Yes
○ No

19. To your knowledge, do the provider organizations with whom you have contracts, have subcontracts with telemedicine-only provider companies?
○ Yes
○ No
○ Don't know

19a. Do you know if real-time, audio-only services are provided?
○ Yes
○ No
○ Don't know

19b. Do you know if your practitioners receive any incentives from the telemedicine-only companies to refer to their services?
○ Yes
○ No
○ Don't know

20. To what degree are you concerned that there will be changes to access for in-person services driven by increased provider preference for providing services via telemedicine or employment with telemedicine-only companies?	○ Not at all concerned ○ Slightly concerned ○ Somewhat concerned ○ Moderately concerned ○ Extremely concerned

21. How often do you perceive that your enrollees' audio-only telemedicine services were provided by telemedicine-only providers?

	Never	Rarely	Sometimes	Often	Always
Commercial enrollees	○	○	○	○	○
Medicaid MCO enrollees	○	○	○	○	○

22. How often do you perceive that your enrollees' audio-only telemedicine services were provided by brick and mortar providers?

	Never	Rarely	Sometimes	Often	Always
Commercial enrollees	○	○	○	○	○
Medicaid MCO enrollees	○	○	○	○	○

For this question, we ask about your perceptions of differences in care provided by telemedicine-only providers and brick-and-mortar providers. We do not require an in-depth analysis. Your response to this question will be de-identified and utilized for aggregate analyses.

23. How do you perceive telemedicine-only providers and brick and mortar providers differ with respect to the following:

	Significantly worse with telemedicine-only providers	Somewhat worse with telemedicine-only providers	About the same with telemedicine-only and brick-and-mortar providers	Somewhat better with telemedicine-only providers	Significantly better with telemedicine-only providers
Access to care and technology	○	○	○	○	○
Patient costs	○	○	○	○	○
Equity	○	○	○	○	○
Clinical effectiveness	○	○	○	○	○
Safety	○	○	○	○	○

For carriers that offer coverage in both the commercial market and contract as Medicaid MCOs:

Based on the questions from this section, please provide any additional information that may vary between the two business lines.

Section V: Impact of audio-only telemedicine on VBP arrangements or VBC programs

We understand that several carriers offer coverage in the commercial market and contract as Medicaid Managed Care organizations. To ensure that the survey captures the most accurate information, we request that staff from both of the lines of business participate in developing survey responses. There will also be free text response fields at the end of each section to provide an opportunity to explain any nuance between these lines of business.

24. When assessing quality performance on traditional quality measures (e.g. blood pressure control), do you specifically carve out performance of audio-only telemedicine services?	○ Yes ○ No
24a. What types of measures? Check all that apply	☐ Access to Care and Technology ☐ Patient Costs ☐ Equity ☐ Clinical Effectiveness ☐ Safety ☐ Other
You selected 'Other' above, please specify here:	_____
24b. How is performance on these measures assessed?	☐ Absolute performance thresholds ☐ Improvement in performance ☐ A combination of absolute thresholds and improvement ☐ Other
You selected 'Other' above, please specify here:	_____
25. What challenges do you foresee or have you experienced in integrating audio-only telemedicine into value-based purchasing arrangements?	_____
26. What opportunities do you see in integrating audio-only telemedicine into your value-based purchasing contracts?	_____
For carriers that offer coverage in both the commercial market and contract as Medicaid MCOs: Based on the questions from this section, please provide any additional information that may vary between the two business lines.	_____

Appendix B: Definitions for Terms and Laws Used in Web-Based Survey (alphabetically listed)

Behavioral health-only providers: those primarily providing substance use or mental health treatment services.

Brick-and-mortar providers: those who serve patients both in-person and via telemedicine.

Compliance: provider adherence to any telemedicine laws pursuant to RCW 48.43.735 and related to patient consent, established relationship, and facility fees. Failure to adhere to these laws results in non-compliance.

Enforcement: activities that carriers or health plans undertake to ensure provider compliance.

Physical health providers: those caring for physical medical conditions. Physical health providers may also provide substance and mental health treatment services, however, in the context of also providing for physical health conditions.

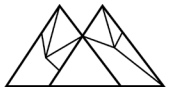
Telemedicine-only providers: those who provide real-time audio-only or audiovisual telemedicine for medical services, but do not provide in-person services (E.g. Teladoc). This does not include individuals or groups that provide other telehealth services, such as remote monitoring, secure messaging, or other asynchronous telehealth services.

Laws

WAC 284-170-433 "Patient Consent" Law requires that providers must obtain verbal or written consent prior to the initiation of the first billable audio-only encounter and may constitute as consent to such encounters for a period of up to 12 months. Consent can be revoked by the patient at any time.

RCW 48.47.735 "Established Relationship" Law requires that providers have access to sufficient health records to ensure safe, effective, and appropriate care services. Additionally, this law requires that the patient have a qualifying encounter to establish a relationship prior to receiving billable audio-only services. A qualifying encounter means an in-person appointment or a real-time interactive appointment using both audio and video technology. This encounter can be with either the clinician providing audio-only services, a clinician in the same practice, or the clinician referring to the provider delivering audio-only services. For health care services included in the essential health benefits category of mental health and substance use disorder services, including behavioral health treatment, the patient must have had at least one qualifying encounter in the past three years. For all other health care services billable by audio-only telemedicine, the qualifying encounter must have been within the past two years.

RCW 48.47.735 and RCW 70.41.530 "Facility Fee" Law governs when a facility fee can be associated with an audio-only telemedicine visit. It states that a facility fee is solely based on the originating site, which is the physical location of a patient receiving health care services through telemedicine, at a qualifying health care facility. However, a hospital that is an originating site or distant site for audio-only telemedicine may not charge a facility fee.



Appendix C: Respondent Challenges with Monitoring for Compliance with Audio-only Telemedicine Laws

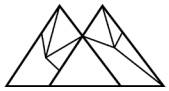
Challenges with Patient Consent Law	
Challenge or Barrier	**Example Quotes**
Lack of automated systems	1. "Operational systems are not designed to measure this compliance requirement."
Labor intensive	1. "The audit process for patient consent would be considerably manual and labor intensive. The only real way to validate patient consent is to look at medical records from the providers. Pulling medical records is a manual process for both providers and health carriers, which would create added costs."
Taken Care of Through Contracting	1."Patient Consent requirement is documented and explicit in Provider Contract compliance provisions and coding policies. Challenges occur when facilitating potential compliance beyond contract expectations."
No Requirement to Monitor	1. "The only mechanism that a carrier would have to identify the absence of patient consent would be to build a denial of a claim. There is no regulatory requirement for a carrier to deny claim in the absence of a patient consent. Also, there is no claim code that signifies consent has been obtained. Thus, we do not have a way to identify when patient consent has not been obtained by the provider." 2."We would only audit for this if there were other indicators of fraud, waste and abuse."

Challenges with Established Relationship Law	
Challenge or Barrier	**Example Quotes**
Lack of automated systems	1. "Operational systems are not designed to measure this compliance requirement." 2. "A review of member claims history would be required to determine the existence of an established relationship. It is not possible to automate this review because the relationship can be established with a provider that is not connected/related to the audio-only provider

	visit. If the providers are within the same practice, the process could exist, but not if the referring provider and the rendering provider are not part of the same practice." 3. "The only mechanism that a carrier would have to identify the absence of established relationship would be to build a denial of a claim. There is no claim code that signifies there is an established relationship between the enrollee and the provider. Thus, we do not have a way to identify if there is an established relationship between the enrollee and the provider."
Labor intensive	N/A
Taken Care of Through Contracting	1. "The established requirement is documented and explicit in Provider Contract compliance provisions and coding policies. Challenges occur when facilitating potential compliance beyond contract expectations."
No Requirement to Monitor	N/A

Challenges with Facility Fee Law	
Challenge or Barrier	**Example Quotes**
Lack of automated systems	1. "Operational systems are not designed to measure this compliance requirement." 2. "Review for compliance with the Facility Fee Law is dependent on providers billing correctly. Additionally, there are some situations that cannot be identified on a claim form."
Labor intensive	1. "We have the ability to see originating site facility fees in our claims data and perform audits when there is unusual activity. For any providers with unusually high volume, Payment Integrity contacts the provider requesting medical records/office notes and reviews to confirm consistency with the claim billing. When inconsistencies are identified, they are communicated back to the provider as findings to facilitate education and recoupment of any inappropriate funds. This

	is a labor-intensive process so cannot be applied to all facility fee claims." 2."This may be reviewed through spot audits of claims."
Taken Care of Through Contracting	1. "The established requirement is documented and explicit in Provider Contract compliance provisions and coding policies. Challenges occur when facilitating potential compliance beyond contract expectations."
No Requirement to Monitor	N/A



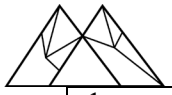
Appendix D: Other Respondent Methods for Monitoring for Audio-Only Telemedicine Fraud

"Other" Respondent Methods for Monitoring for Audio-Only Telemedicine Fraud
"[Plan name] has incorporated telemedicine into all weekly analytical trigger reports to identify suspicious activity involving fraud and abuse."
"We monitor for outliers on those codes that may be used inappropriately in place of appropriate codes, review industry alerts, and participate in information sharing with other payors, regulators, and law enforcement agencies."
"Our SIU department uses a variety of established techniques to screen for possible fraud including those listed."
"We actively solicit for internal and external tips from staff, providers, and consumers. We also rely on algorithms and automated data mining. When the output of those processes meets certain criteria, we conduct a manual, in depth review of the provider including their claims data, credentialing, and social presence. If warranted, we may open a pre-payment or retrospective claims audit to identify improper payments or billing habits. For Medicaid enrollees, we send a random sample of Service Verification Forms monthly. These letters offer a description of services provided to the enrollee and ask them to alert us if any of those services were not received as described. EOBs serve the same purpose for commercial enrollees. Claims edits are also in place to trigger either a denial or a manual review if criteria is met which is consistent with fraud, waste, or abuse. We also review certain hospital claims against supporting medical records for appropriateness of DRG codes and severity index. Recoveries in those cases are triggered automatically."

Appendix E. Challenges and Opportunities to Integrate Audio-Only Telemedicine Into VBP Arrangements or VBC Programs

Respondent Comments on Challenges with Integrating Audio-Only Telemedicine into VBP Arrangements or VBC Programs
"There are currently no measures that use audio-only telemedicine visits; Challenges include: (1) Developing clinical measures that can allow using audio-only telemedicine visits as most clinical visits may need physical exam; (2) Ensuring appropriate coding and billing for such visits; (3) Not all providers may have the capabilities to conduct visits via telemedicine; (4) Not all patients would be able to use telemedicine or may not prefer it as a mode to see their doctor."
"We treat all billed codes equally for calculating quality metric performance. There is not a challenge associated with including telehealth or audio-only if the billing and accompanying supplemental data substantiate the quality gap closure."
"Specific impact analysis that is required to understand the efficacy of audio-only interventions and ensure correct incentivization for health outcomes as a result of the service."
"We do not anticipate expanding audio-only telehealth into value-based contracts due to the following: • Billing and reimbursement challenges, including lack of providers using the correct modifier, potential for overuse, and the verification to determine what was clinically appropriate • Impact to clinical care, lack of physical examination, inequities in the amount of clinical effort required, and the impact to the doctor/patient relationship • Limited use for telemedicine in closing quality care gaps and not eligible for risk adjustment purposes"
"The challenges we foresee in value-based purchasing arrangements is two-fold. First, the lack of sophistication of audio-only services and, second, member attribution to a value-based contract may be difficult based on current models in the market."
"Our value based health system partner offers telehealth services. There hasn't been an issue."

Respondent Comments On Opportunities with Integrating Audio-Only Telemedicine into VBP Arrangements or VBC Programs
"There is an opportunity to integrate audio-only telemedicine visits in value-based arrangements as a way to provide immediate access to care."
"N/A - we do not expect to ever do this"
"An opportunity would be for providers to ensure they are sending along sufficient supplemental data when performing audio-only telehealth services, to ensure credit is earned for quality care gap closures.
"Opportunities to reduce the cost of care and improve the quality of care."
"The expansion of the ability for providers to engage in VBC contracts if there is the ability to correctly incentivize care. There are still many unknowns that limit implementation of VBC, however."
"We do not see any opportunity in integrating audio-only telemedicine into our Value-Based Contracts."
"Currently, no opportunities identified."
"Any version of telemedicine could be included in a VBP agreement for a provider to



determine how to manage their risk in the agreement and meet the metrics written into the agreement.”