

Audio-only Telemedicine & Clinical Quality Research Tracking - Last Updated December 22, 2023					
Title	Source	Link	Description	Notes	Date
Use of New Audio-Only Telemedicine Claim Modifiers	JAMA Network Open	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2812892	A study describing early trends in the use of new audio-only telemedicine claims modifiers 93 and FQ in Washington State, which were introduced to improve the designation and identification of audio-only telemedicine claims.	In this study, uptake of new audio-only telemedicine claims modifiers 93 and FQ remained low; preliminary trends suggest that audio-only telemedicine may offer important means to access behavioral health and prenatal care.	12/18/2023
Family caregivers' satisfaction with telerehabilitation and follow-up intervention for older people with dementia: Randomized clinical trial	Geriatric Nursing	https://www.sciencedirect.com/science/article/abs/pii/S019745722300201X?via%3Dihub	The present study aimed to assess caregiver satisfaction with a telerehabilitation program and remote monitoring for older adults with dementia and their caregivers during the COVID-19 pandemic, as well as to identify the factors influencing caregiver satisfaction.	Both groups expressed positive views towards the treatment, with excellent ratings for audio and video quality, and a preference for Internet-based treatment over face-to-face.	9/11/2023
Care Redesign to Support Telemedicine Implementation During the COVID-19 Pandemic: Federally Qualified Health Center Personnel Experiences	Journal of the American Board of Family Medicine (JABFM)	https://www.jabfm.org/content/36/5/712.long	This study analyzes FQHC personnel accounts of care redesign strategies to support telemedicine implementation in 2020 and 2021, and identifies improvement opportunities.	Clinics' strategy of using phone visits to increase privacy underscores the need to continue offering audio-only visits in FQHCs, whose patients often have few alternative privacy-enhancing options.	8/30/2023
Impact of Telemedicine Modality on Quality Metrics in Diverse Settings: Implementation Science-Informed Retrospective Cohort Study	Journal of Medical Internet Research	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10413089/	The aim of this study was to assess telemedicine uptake and impact of visit modality (in-person vs video and phone visits) on primary care quality metrics in diverse, low socioeconomic status settings.	We found marginally better quality metrics (ie, blood pressure and depression screening) for in-person care versus video and phone visits; de-adoption of telemedicine was marked within 2 years in our population.	7/26/2023
Feasibility, Acceptability, and Health Outcomes Associated with Telehealth for Children in Families with Limited English Proficiency: A Systematic Review	Academic Pediatrics	https://pubmed.ncbi.nlm.nih.gov/37385437/	A systematic review of the feasibility, acceptability, and/or associations between telehealth delivery and health outcomes for interventions delivered synchronously in the US.	Telehealth appears acceptable and feasible among children in families with limited English proficiency (LEP), with a limited evidence base for specific health outcomes.	6/27/2023
Provider Perceptions and Use of Mental Health Services in the Veterans Health Administration During the COVID-19 Pandemic	APA PsychNet	https://psycnet.apa.org/fulltext/2023-76323-001.html	An article describing the delivery of mental health services during the pandemic in two Veterans Health Administration (VHA) regions that include 15 hospitals and over 100 outpatient facilities in the southern United States.	Despite significant challenges related to the COVID-19 pandemic, provider survey and health system delivery data suggest that Veterans largely maintained access to U.S. Department of Veterans Affairs mental health services using telemental health services. However, reductions in specialized mental health services such as the delivery of evidence-based psychotherapy and the use of measurement-based care were noted.	6/1/2023
Assessing Disparities in Video-Telehealth Use and eHealth Literacy Among Hospitalized Patients: Cross-sectional Observational Study	JMIR Formative Research	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10221502/	Original manuscript evaluating video capabilities, eHealth literacy, and engagement with video telehealth among hospitalized patients.	Patients with low eHealth literacy reported greater participation in audio-only telehealth over video telehealth, of which the former may lose its flexible pandemic reimbursement policy. This may widen the existing health disparities as older adults and patients with low eHL face challenges in accessing video telehealth services.	5/12/2023
Remote care through telehealth for people with inflammatory bowel disease	Cochrane Database of Systematic Reviews	https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD014821.pub2/full	A systematic review to identify the communication technologies used to achieve remote healthcare for people with inflammatory bowel disease and to assess their effectiveness.	No difference was found between telephone based disease monitoring and face to face monitoring in terms of their effect on the occurrence of flare ups or relapses in adults with IBD, but the results are very uncertain.	5/4/2023
Evaluating a Telephone and Home Blood Pressure Monitoring Intervention to Improve Blood Pressure Control and Self-Care Behaviors in Adults with Low-Socioeconomic Status	International Journal of Environmental Research and Public Health	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10094475/	A pilot project using a pre/post, matched-cohort design to evaluate the effect of a telehealth intervention on BP control and self-care behaviors.	Overall, telephone counseling and HBPM were feasible and effective in reducing BP and increasing self-care behaviors.	4/20/2023



Vermont Program for Quality in Health Care, Inc.

Audio-only Telemedicine & Clinical Quality Research Tracking - Last Updated December 22, 2023					
Title	Source	Link	Description	Notes	Date
Telehealth and telemedicine in the management of adult patients after hospitalization for COPD exacerbation: a scoping review	Jornal Brasileiro de Pneumologia	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10171265/	A bibliographic search to map the evidence of telehealth/telemedicine for the monitoring of adult COPD patients after hospitalization due to an exacerbation.	Telehealth/telemedicine in combination with telemonitoring can be an interesting strategy to benefit COPD patients after discharge from hospitalization for an exacerbation, by improving their quality of life and reducing re-hospitalizations, admissions to emergency services, hospital length of stay, and health care costs.	4/17/2023
Perceptions of telehealth among older U.S. adults during the COVID-19 pandemic: A national survey	J Telemed Telecare	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10080170/	Study examining telehealth experiences, attitudes, and behaviors of a representative sample of U.S. adults aged 50–80 in the early months of the pandemic to inform future policymaking.	The findings highlight the degree to which older adults depended on audio-only visits to access care when in-person care was limited. Findings demonstrate the prevalence of audio-only visits and suggest there will be a need for ongoing support for audio-only visits.	4/6/2023
Patient Characteristics Associated With Being Offered or Choosing Telephone vs Video Virtual Visits Among Medicare Beneficiaries	JAMA Network Open	https://jama.jamanetwork.com/article.aspx?doi=10.1001/jamanetworkopen.2023.5242&utm_campaign=articlePDF%26utm_medium=articlePDFlink%26utm_source=articlePDF%26utm_content=jamanetworkopen.2023.5242	An article with survey findings re. patient characteristics associated with being offered or choosing telephone vs video visits.	Medicare beneficiaries often reported being offered or choosing telephone visits even when video visits were available. Study findings suggest that policy makers and clinical leaders should support the use of telephone visits to the extent that telephone is appropriate, while addressing both practice-level and patient-level barriers to video visits.	3/29/2023
Telemedicine for unhealthy alcohol use in adults living with HIV in Alabama using common elements treatment approach: A hybrid clinical efficacy-implementation trial protocol	Contemporary Clinical Trials Communications	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10090240/	A methods paper describing a randomized controlled clinical trial to evaluate the effectiveness and implementation of telephone-delivered Common Elements Treatment Approach (T-CETA), a transdiagnostic cognitive behavioral therapy protocol for unhealthy	This trial will inform alcohol treatment within HIV care programs, including the need to consider comorbidities, and the potential impact of alcohol interventions on HIV and quality of life outcomes.	3/24/2023
The Role of Telehealth in Achieving a High Performing Rural Health System: Priorities in a Post-Pandemic System	Rural Policy Research Institute	https://rupri.org/wp-content/uploads/The-Role-of-Telehealth-in-Post-Pandemic-HP-February-2023.pdf	A commentary on the preconditions for the optimum use of telehealth, looking at experiences of telehealth usage during the PHE.	Significant disparities exist among subgroups in terms of audio-only versus video telehealth use. Rural patients were less likely than urban patients to use telehealth video visits and more likely to use audio-only telehealth visits.	2/16/2023
Telephone-Delivered Interventions for Suicide Prevention in Schizophrenia and Related Disorders: A Systematic Review	Healthcare	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9913894/	A bibliographic search to explore the effectiveness of telephone-based suicide prevention programs among patients with schizophrenia and related disorders.	The use of a telephone contact approach appears to be feasible and effective in schizophrenia patients with suicidal behaviors. The preliminary evidence also suggests that this system appears to reduce suicidal ideation.	2/11/2023
Telehealth Delivery of Behavioral Health Care in Medicaid: Findings from a Survey of State Medicaid Programs	KFF	https://www.kff.org/medicaid/issue-brief/behavioral-health-crisis-response-findings-from-a-survey-of-state-medicaid-programs/	An article with survey findings re. how states have expanded behavioral health telehealth policy in response to COVID-19, what trends states have observed in behavioral health telehealth utilization, and key issues to watch	States most commonly reported adding audio-only coverage of behavioral health services, which can help facilitate access to care, especially in rural areas with broadband access challenges and for older populations who may struggle to use audiovisual technology.	1/10/2023
New Coding Modifier Offers Opportunity To Investigate Audio-Only Telehealth	Health Affairs	https://www.healthaffairs.org/content/forefront/new-coding-modifier-offers-opportunity-investigate-audio-only-telehealth	An article providing an overview of the rationale for and process of creating the CPT Modifier 93 code.	The CPT 93 modifier permits differentiation among audio-only, audiovisual, and in-person care at the administrative level, which subsequently allows health service researchers to monitor and evaluate the use and clinical efficacy among these methods of care delivery.	11/18/2022
Predictors of Video versus Audio-Only Telehealth Use among Urological Patients	Urology Practice	https://www.auajournals.org/doi/10.1097/UPI.0000000000000301	Study determining the relative effect of demographic, socioeconomic and geographic variables on the likelihood of using video compared to an audio-only telehealth.	Without coverage and reimbursement of audio-only visits, video telehealth could exacerbate health disparities in access to urological care.	11/16/2022



Vermont Program for Quality in Health Care, Inc.

Audio-only Telemedicine & Clinical Quality Research Tracking - Last Updated December 22, 2023					
Title	Source	Link	Description	Notes	Date
Bridging the Digital Divide: Advancing Telehealth Equity	Massachusetts Association of Health Plans	https://www.mahp.com/wp-content/uploads/2022/11/WIFI_Study_2022.pdf	Research study on telehealth use in MA since the onset of the COVID-19 pandemic. The goals of this study were to measure differences in telehealth use across populations, investigate the root causes of inequities from the perspectives of patients, providers, and	Audio-only visits had value for specialized populations, such as older adults and homeless populations, where access to video enabled devices was lower. Many reported that in some telehealth platforms, it was very difficult to include interpreters in video telehealth; thus, these telehealth visits were audio-only and used a telephone interpreter service.	11/1/2022
Evidence of Phone vs Video-Conferencing for Mental Health Treatments: A Review of the Literature	Curr Psychiatry Rep.	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9437398/	A comparative review of using phone (audio-only) or video for mental health treatments. Includes evidence of phone and video's effectiveness in terms of reduced symptomology, retention, satisfaction,	Due to the greater availability of phone for those who are so often at the margins of receiving mental health care, we ultimately recommend an accommodating approach above all, one that flexibly makes use of both phone and video.	10/24/2022
Disparate healthcare access and telehealth-based hybrid consultations during the COVID-19 pandemic	Work	https://content.iospress.com/articles/work/wor211463	A quality improvement project to evaluate the feasibility of hybrid consultations that combined televisits and abbreviated in-person visits for neuromuscular referrals.	Telehealth-based hybrid neuromuscular consultations are feasible with minor caveats. However, the future of telehealth may be restricted by decreasing reimbursement rates particularly for audio-only televisits, limiting its potential to improve healthcare access.	10/17/2022
Use of and Retention on Video, Telephone, and In-Person Buprenorphine Treatment for Opioid Use Disorder During the COVID-19 Pandemic	Journal of the American Medical Association Network Open	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2797201?utm_source=For+The+Media&utm_medium=referral&utm_campaign=ftm_links&utm_term=101222	A study comparing patient characteristics across receipt of different treatment modalities and to assess whether modality was associated with retention during the year following COVID-19-related policy changes.	Discontinuing or reducing telephone-only access may disrupt treatment for groups with access disparities, and telehealth-delivered buprenorphine may support retention.	10/12/2022
Why Telehealth Has Become an Integral Part of the Mental Healthcare Landscape	mHEALTH INTELLIGENCE	https://mhealthintelligence.com/features/why-telehealth-has-become-an-integral-part-of-the-mental-healthcare-landscape	An article discussing the benefits of telemental care for providers and patients alike and detailing trends impacting the use of virtual care modalities in the future.	"Audio only... really weighs into the equity piece for individuals that don't have broadband, that don't have the technological literacy." "It just creates more access."	10/6/2022
Audio-Only Telemedicine Visits: Flaws In The Underlying Data Make It Hard To Assess Their Use And Impact	Health Affairs	https://www.healthaffairs.org/content/forefront/audio-only-telemedicine-visits-flaws-underlying-data-make-hard-assess-their-use-and	Article describing how audio-only visit use is measured, summarizes current estimates, and highlights some discrepancies using data from the Medicare Current Beneficiary Survey. Discusses how these issues impact the ongoing debate about the future of audio-only visits.	The inability to distinguish audio-only and video visits with confidence is problematic for efforts to improve health equity. The inability to differentiate by modality may ultimately complicate quality assessments.	7/15/2022
Satisfaction with modes of telemedicine delivery during COVID-19: A randomized, single-blind, parallel group, noninferiority trial	American Journal of the Medical Sciences	https://www.amjmedsci.org/article/S002-9629(22)00299-3/fulltext	Study determining whether patient satisfaction with phone-only was noninferior to video visits.	Among a group of diverse, established older or underserved patients, the satisfaction rate for phone-only was noninferior to video visits. These findings could impact practice and policies governing telemedicine.	7/3/2022
Guidance on How the HIPAA Rules Permit Covered Health Care Providers and Health Plans to Use Remote Communication Technologies for Audio-Only Telehealth	U.S. Department of Health and Human Services	https://www.hhs.gov/hipaa/for-professionals/privacy/guidance/hipaa-audio-telehealth/index.html	Guidance to help covered entities understand how they can use remote communication technologies for audio-only telehealth in compliance with the HIPAA Rules, including when OCR's Notification of Enforcement Discretion for Telehealth Remote Communications (Telehealth Notification) is no longer in effect.	This guidance will help ensure that individuals can continue to benefit from audio-only telehealth by clarifying how covered entities can provide telehealth services and improving public confidence that covered entities are protecting the privacy and security of their health information.	6/13/2022
Guidance on How the HIPAA Rules Permit Covered Health Care Providers and Health Plans to Use Remote Communication Technologies for Audio-Only Telehealth	HHS.gov: U.S. Department of Health & Human Services	https://www.hhs.gov/hipaa/for-professionals/privacy/guidance/hipaa-audio-telehealth/index.html	Guidance to help covered entities understand how they can use remote communication technologies for audio-only telehealth in compliance with the HIPAA Rules.	While audio-only telehealth may be preferred by some individuals with disabilities, covered entities should be mindful that audio-only telehealth may not provide effective communication for other individuals with disabilities, such as individuals who are deaf.	6/13/2022



Vermont Program for Quality in Health Care, Inc.

Audio-only Telemedicine & Clinical Quality Research Tracking - Last Updated December 22, 2023					
Title	Source	Link	Description	Notes	Date
HHS, Providers View Audio-Only Telehealth as Key Health Equity Strategy	mHEALTH INTELLIGENCE	https://mhealthintelligence.com/features/hhs-providers-view-audio-only-telehealth-as-key-health-equity-strategy	An article summarizing the first-ever National Telehealth Conference hosted by DHHS and describing how federal agencies are examining ways to boost telehealth adoption and access.	Leaders acknowledged that audio-only telehealth has emerged as a critical health equity and behavioral health integration tool.	5/19/2022
The Doctor Will Hear You Now: Audio-Only Telehealth and the Promise of Access, Equity, and Engagement in Medicaid	Center for Health Care Strategies	https://www.chcs.org/the-doctor-will-hear-you-now-audio-only-telehealth-and-the-promise-of-access-equity-and-engagement-in-medicaid/	Blog post describing why and how states can support audio-only telehealth.	People enrolled in Medicaid are among the most likely to benefit from the continuation of audio-only visits.	3/31/2022
Allowance of Telehealth in the 2022 Child, Adult, and Health Home Core Set Measure Specifications	CMS: Centers for Medicare & Medicaid Services	https://www.medicare.gov/medicaid-quality-of-care/downloads/telehealth-ta-resource.pdf	A technical assistance resource documenting how audio-only telehealth and other types of visits are counted in the Medicaid and CHIP quality measures.	Table 1 defines the types of telehealth included in the measure specifications. Table 2 includes measures that allow telehealth. Table 3 includes measures for which telehealth is not applicable.	3/1/2022
Telemedicine implementation and use in community health centers during COVID-19: Clinic personnel and patient perspectives	Social Science & Medicine Qualitative Research in Health	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8830142/	This study investigates how FQHC personnel and patients used and experienced telemedicine during the pandemic with a focus on language service provision.	Audio-only visits were of particular benefit to reach patients of older age, with limited English proficiency, and with limited digital literacy.	2/10/2022
National Survey Trends in Telehealth Use in 2021: Disparities in Utilization and Audio vs. Video Services	Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services	https://aspe.hhs.gov/reports/hps-analysis-telehealth-use-2021	An issue brief analyzing national trends in telehealth utilization across all payers and examining how use of video-enabled vs. audio-only telehealth services differ across patient populations.	The study finds notable disparities by race, ethnicity, income, age, and insurance status in access to video-enabled telehealth.	2/1/2022
Predictors of Audio-Only Versus Video Telehealth Visits During the COVID-19 Pandemic	Journal of General Internal Medicine	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8597874/	Paper identifying patient subgroups that are more probable to access telehealth through phone versus video.	Patients who are older, are African-American, require an interpreter, use Medicaid, and live in areas with low broadband access are less likely to use video visits as compared to phone. Post-pandemic policies that eliminate insurance coverage for phone visits may decrease telehealth access for patients who have one or more of these	11/17/2021
Community Health Centers' Telehealth Promising Practices	National Association of Community Health Centers	https://conferences.nachc.org/articles/4753/view	Case studies reporting some of the challenges faced and lessons learned by a sampling of community health centers who responded to the pandemic by developing or expanding their telehealth programs to meet both general and specific needs that arose during the COVID-19 pandemic.	The <i>Next Community Health</i> describes a program that has helped patients with uncontrolled diabetes make significant improvements to their overall health. After the endocrinologist conducted a one-hour video telehealth appointment to establish care, conducted an exam, and ordered necessary labs, he would follow-up personally with each patient by telephone every week for six months to ensure they were adhering to their plan of care. Telemedicine can help extend	6/1/2021
The Doctor Will Call Me Maybe: The Uncertain Future Of Audio-Only Visits And Why We Need Them To Address Disparities	Health Affairs	https://www.healthaffairs.org/doi/10.1377/hllog20210225.26462/full/	An opinion piece recommending reimbursement of audio-only visits should continue for several years after the public health emergency to avoid exacerbating disparities in access to care.	We are at risk of devaluing and prematurely casting off a key telemedicine modality, a move that could mean the difference between a needed doctor visit and no visit at all.	3/3/2021
Telehealth Use Among Safety-Net Organizations in California During the COVID-19 Pandemic	JAMA Network	https://jamanetwork.com/journals/jama/fullarticle/2776166	A research letter describing trends in the use of in-person, telephone, and video visits among California FQHCs before and during the COVID-19 pandemic.	Eliminating coverage for telephone visits could disproportionately affect underserved populations and threaten the ability of FQHCs to meet patient needs.	2/2/2021



Vermont Program for Quality in Health Care, Inc.

Audio-only Telemedicine & Clinical Quality Research Tracking - Last Updated December 22, 2023					
Title	Source	Link	Description	Notes	Date
Improving Medication Adherence With Telemedicine for Adults With Severe Mental Illness	Psychiatric Services	https://pubmed.ncbi.nlm.nih.gov/30651059/	A study evaluating a telephone call and text message intervention to improve adherence to medication among patients with severe mental illness.	Telemedicine via telephone can deliver low-threshold support to patients who are otherwise at high risk of progressive nonadherence to their psychotropic medication after 6 months.	3/1/2019
The Use of Telehealth for Disability Evaluation in Medicine and Allied Health: Proceedings of a Workshop (2022)	National Academies of Sciences, Engineering, and Medicine	https://nap.nationalacademies.org/catalog/26650/the-use-of-telehealth-for-disability-evaluations-in-medicine-and-allied-health	Proceedings from a conference to examine telehealth and evaluate potential challenges or barriers specific to this mode of care delivery, particularly in respect to patient evaluation.	Audio-only modalities are especially important because while synchronous video platforms are popular with some groups, they can exacerbate inequities by favoring patients who speak English, are familiar with the required devices, and have	2022