

ASPR TRACIE Technical Assistance Request

Request Receipt Date (by ASPR TRACIE): 16 June 2022

Response Date: 15 July 2022

Type of TA Request: Complex

Request:

ASPR TRACIE received a request for information on telehealth as it relates to maximizing the benefits of telehealth services via the Centers for Medicare & Medicaid Services (CMS). Specifically, the requestor asked for resources on the use and impact of telehealth during the COVID-19 pandemic and beyond; CMS telehealth policies (before and during COVID-19); telehealth implementation lessons learned; and the future of telehealth.

Response:

The ASPR TRACIE Team reviewed existing resources within our [COVID-19 Telemedicine/Virtual Medical Care Resources](#) page and [Virtual Medical Care Topic Collection](#). We also conducted online searches and consulted ASPR TRACIE subject matter experts to further identify relevant material.

Section I of this document includes telehealth-specific legislative and regulatory resources developed prior to the COVID-19 pandemic. Section II includes legislative and regulatory resources developed during the pandemic. Section III contains telehealth coverage, reimbursement, and benefit information. Section IV includes resources on telehealth lessons learned as they relate to implementation and use. Resources marked with an asterisk (*) appear in more than one category.

The ASPR TRACIE Team would also like to highlight our [COVID-19 and Telehealth Quick Sheet](#), a snapshot on telehealth use and trends during the COVID-19 pandemic and our [COVID-19 and Telehealth Tip Sheet](#) that describes telehealth use during the pandemic and the associated challenges and changes identified.

I. Legislative and Regulatory Telehealth Resources PRIOR to the COVID-19 Pandemic

*Centers for Medicare & Medicaid Services. (2018). [ACO Next Generation Model Telehealth Waiver Frequently Asked Questions](#).

This document provides frequently asked questions and answers related to the Telehealth Expansion Waiver. The first section includes questions regarding waiver policy, and the second section includes questions on data submission requirements.

Davidsen, B. (2017). [Considerations When Treating Natural Disaster Victims Through Telemental/Telebehavioral Health Program](#). Epstein, Becker, Green, P.C.

This article provides a general overview of limitations in state laws that may create liability issues associated with the delivery of behavioral health services through telehealth technology.

Ferrante, T. and Lacktman, N. (2018). [Top 5 Ways Telehealth Will Change Under the New Federal Funding Bill](#). Foley & Lardner, LLP.

The authors summarize major changes and benefits related to the passage of expanded telehealth legislation that was signed into law in February of 2018.

Gonzalez, G. (2018). [Telemedicine Expands Care, Adds Exposures](#). Business Insurance.

This resource discusses the increased risk for medical malpractice associated with the rise in telemedicine usage. It outlines complex challenges associated with implementing new care models and technology under outpaced legal and regulatory guidelines.

Harju, A., Neufeld, J. (2021). [The Impact of the Medicaid Expansion on Telemental Health Utilization in Four Midwestern States](#). (Abstract only). *Telemedicine and e-Health*. 27(11): 1260-1267.

This paper examines secondary data to assess increases in mental telehealth services in states with expanded Medicaid programs. Results show that from 2014-2017 Medicaid expansion states had 54% more telemental health claims than non-expansion states.

Harvey, J.B., Valenta, S., Simpson, K., et. al. (2019). [Utilization of Outpatient Telehealth Services in Parity and Nonparity States 2010–2015](#). (Abstract only). *Telemedicine and e-Health*. 25(2): 132-136.

This article describes trends in telehealth use among privately insured patients from 2010-2015. Using commercial claims data, the authors evaluated changes in use of telehealth services among states that enacted legislation requiring reimbursement versus those that did not.

Roberts, S. (2018). [ASHRM Whitepaper – Telemedicine: Risk Management Considerations](#). American Society for Health Care Risk Management.

The author conducted a detailed review of the ASHRM Telemedicine Whitepaper, which users must login to obtain. It provides a general overview of telemedicine and discusses potential vulnerabilities, as part of a ASHRM risk management framework.

*U.S. Department of Health and Human Services. (2009). [Pandemic and All-Hazards Preparedness Act \(Public Law 109-417\) Telehealth Report to Congress](#).

This report reviews the state of integrating telehealth capabilities into public health emergencies and disaster medical responses. It includes an overview of initiatives and summarizes the benefits, deficiencies, and challenges identified during that time.

II. Legislative and Regulatory Telehealth Resources DURING the COVID-19 Pandemic

Alliance for Connected Care. (2020). [State Telehealth and Licensure Expansion COVID-19 Dashboard](#).

This regularly updated website details the status of COVID-19 emergency waivers and telehealth licensing flexibilities by state. It tracks and highlights those that have expired or been extended.

American Hospital Association. (2020). [Making Telehealth Flexibilities Permanent: Legislation or Regulation?](#)

This document lists the necessary legislative and regulatory actions needed to maintain expanded telehealth flexibilities that were made available during the COVID-19 public health emergency. They are organized provider/patient location, eligible providers and facilities, types of services, technologies, and billing, payment, and coverage information.

ASPR TRACIE. (2020). [COVID-19 and Telehealth](#).

The COVID-19 pandemic rapidly changed how healthcare was delivered. In particular, the use of telehealth increased significantly as providers and consumers had to comply with social distancing regulations. This tip sheet describes the use of telehealth pre-pandemic, the changes it has undergone, and the challenges faced.

Center for Connected Health Policy. (2020). [COVID-19 Related State Actions](#).

This website provides regular updates regarding telehealth-related state policy changes. To review the COVID-19 updates, see the section marked “Summary of Changes”.

Center for Connected Health Policy. (2021). [COVID-19 Telehealth Coverage Policies](#).

This resource provides a summary of changes CMS has made to telehealth policy for Fee-for-Service Medicare.

Centers for Medicare & Medicaid Services. (2021). [Calendar Year \(CY\) 2022 Medicare Physician Fee Schedule Final Rule](#).

This fact sheet provides information on CMS post-public health emergency telehealth policy changes related to Medicare payments under the Physician Fee Schedule (PFS). For more information on the PFS, visit the following CY 2022 PFS Final Rule website: <https://www.cms.gov/medicare/medicare-fee-service-payment/physicianfeeschedpfs-federal-regulation-notice/cms-1751-f>.

Centers for Medicare & Medicaid Services. (2022). [Coronavirus Waivers & Flexibilities](#).

This website provides links to information on various COVID-19 waivers and flexibilities. **NOTE:** The most significant telehealth developments were in the first and second IFCs (dated 3/30/2020 and 4/30/2020, respectively). The links to “[Frequently Asked Questions to Assist Medicare Providers](#)” and “[COVID-19 Emergency Declaration Blanket Waivers & Flexibilities for Health Care Providers](#)” are also useful resources for this TA request.

Centers for Medicare & Medicaid Services. (2021). [42 CFR Parts 412, 416, 419, and 512](#).

Specific to the Hospital Outpatient Prospective Payment System, there was a comment solicitation in the CY 2022 OPSS rule on the availability of mental health services furnished by clinical staff of the hospital to beneficiaries in their homes following the public health emergency. That comment solicitation begins on page 63748 of this document.

Centers for Medicare & Medicaid Services. (2020). [General Provider Telehealth and Telemedicine Toolkit](#).

This document contains links to reliable sources of information regarding telehealth and telemedicine, including specific documents useful for choosing telemedicine vendors, initiating a telemedicine program, remote patient monitoring, and developing documentation tools. It also includes guidance for providers on caring for patients via virtual services that may be temporarily used during COVID-19.

Centers for Medicare & Medicaid Services. (2020). [Long-Term Care Nursing Homes Telehealth and Telemedicine Tool Kit](#).

This toolkit assists Medicare providers in understanding regulatory flexibilities associated with provision of telehealth visits, virtual check-ins, and e-visits during the COVID-19 pandemic. It provides information that may be helpful in establishing a telemedicine program, including policy and implementation guidance, links to state statutes, telehealth setup basics, technical assistance sources, vendor selection information, and resources for nursing homes, patients, and the community.

Centers for Medicare & Medicaid Services. (n.d.). [State Medicaid & CHIP Telehealth Toolkit Policy Considerations for States Expanding Use of Telehealth. COVID-19 Version](#). (Accessed 7/13/2022.)

This guide helps states identify which aspects of their statutory and regulatory infrastructure may impede the rapid deployment of telehealth capabilities in their Medicaid program. It also includes a list of questions state policymakers can use to assess whether they have addressed potential obstacles.

Center for Telehealth and e-Health Law. (2021). Telehealth Cost Impact Study. (Contact the [ASPR TRACIE Assistance Center](#) for a copy of this document).

This infographic summarizes information about a 2017 study, conducted on behalf of CMS and congressional staffers, that researched the impacts of telehealth services on healthcare costs, including its benefits, and overall effectiveness. It includes project history, key findings, and conclusions.

Goldwater, J., Harris, Y. (2021). Cost Benefit Analysis of Telehealth: March 2020-September 2020. (Contact the [ASPR TRACIE Assistance Center](#) for a copy of this document). Center for Telehealth and e-Health Law.

Data from six large health systems were analyzed across a variety of services and demographic profiles to help understand how patients, healthcare organizations, and providers utilized telehealth services during the COVID-19 pandemic. The document reviews the overall impacts to healthcare access, costs, and quality of care.

Guth, M., and Hinton, E. (2020). [State Efforts to Expand Medicaid Coverage & Access to Telehealth in Response to COVID-19](#). Kaiser Family Foundation.

This issue brief, developed early in the pandemic, addresses federal guidance to assist Medicaid programs in developing telehealth policies in response to COVID-19. It discusses trends in state Medicaid activity to expand coverage and access, as well as state and federal efforts to support provider infrastructure and patient access to telehealth.

Interstate Medical Licensure Compact. (2021). [Interstate Medical Licensure Compact](#).

This webpage provides information on the agreement between 29 states, the District of Columbia, and the Territory of Guam, where licensed physicians can qualify to practice medicine across state lines if they meet the agreed upon eligibility requirements.

*National Association of Community Health Centers. (2020). [Telehealth Implementation Quick Guide - COVID-19 Resource Packet](#).

This resource packet provides guidance for health centers wanting to implement telehealth and virtual services within their organization. It includes information on telemedicine reimbursements, legal considerations, operationalizing telehealth services, and includes telehealth-based clinical workflows.

*Shachar, C., Engel, J., Elwyn, G. (2020) [Implications for Telehealth in a Postpandemic Future: Regulatory and Privacy Issues](#). JAMA. 323(23): 2375-2376.

This article reviews the major changes that occurred in healthcare as a result of the COVID-19 pandemic. It discusses the issues, challenges, and benefits such as payment parity, patient privacy regulations, and licensing flexibilities.

U.S. Department of Health and Human Services. (2022). [HHS Issues Guidance on HIPAA and Audio-Only Telehealth](#).

This guidance document is intended to help covered healthcare providers understand how they can continue to benefit from audio-only telehealth by clarifying how they can provide these services in compliance with the Health Insurance Portability and Accountability Act (HIPAA) Rules and by improving public confidence that covered entities are protecting the privacy and security of their health information.

*U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE).

Multiple reports from HHS ASPE include the following:

- Chu, R.C., Peters, C., De Lew, N., et al. (2021). [State Medicaid Telehealth Policies Before and During the COVID-19 Public Health Emergency](#).
- HHS ASPE. (2020). [Medicare Beneficiary Use of Telehealth Visits: Early Data from the Start of the COVID-19 Pandemic](#).
- Karimi, M., Lee, E.C., Couture, S.J., et al. (2022). [National Survey Trends in Telehealth Use in 2021: Disparities in Utilization and Audio vs. Video Services](#).
- Samson, L.W., Tarazi, W., Turrini, G., et al. (2021). [Medicare Beneficiaries' Use of Telehealth in 2020: Trends by Beneficiary Characteristics and Location](#).
- Tarazi, W., Ruhter, J., Bosworth, A., et al. (2021). [The Impact of the COVID-19 Pandemic on Medicare Beneficiary Utilization and Provider Payments: Fee-For-Service \(FFS\) Data for 2020](#).

*U.S. Department of Health and Human Services, Health Resources and Services Administration. (n.d.). [Telehealth Webpage for Providers](#). (Accessed 7/13/2022.)

This webpage provides telehealth guidance for providers, including information on [best practices](#), and an overview of uses and summaries of COVID-19 related [policy changes](#), [billing](#), and [legal considerations](#).

*U.S. Senate. (2022). [Consolidated Appropriations Act, 2022](#).

On March 15, 2022, President Joe Biden signed into law the Consolidated Appropriations Act (CAA), 2022, which was passed by Congress on March 8, 2022. The CAA temporarily extends meaningful changes for reimbursement of Medicare services

delivered via telehealth. All CAA provisions regarding telehealth amendments will last for 151 days following the expiration of the public health emergency.

III. Telehealth Services, Coverage, and Reimbursement Resources

*Centers for Medicare & Medicaid Services. (2018). [ACO Next Generation Model Telehealth Waiver Frequently Asked Questions](#).

This document provides frequently asked questions and answers related to the Telehealth Expansion Waiver. The first section includes questions regarding waiver policy, and the second section includes questions on data submission requirements.

Centers for Medicare and Medicaid Services. (2020). [Billing and Payment Fact Sheet for Ambulance Suppliers and Providers \(Participants\)](#). Emergency Triage, Treat, and Transport (ET3) Model.

This factsheet provides an overview of two payment plans to be tested under the ET3 model that includes paying for eligible patient transport to alternative destination partners and providing treatment in place at either the scene of an emergency response, or via telehealth. Information includes conditions for use and guidance on billing and coding.

Centers for Medicare and Medicaid Services. (n.d.). Billing and Payment Fact Sheet for Treatment in Place Services by Qualified Health Care Partners. (Contact the [ASPR TRACIE Assistance Center](#) for a copy of this document). Emergency Triage, Treat, and Transport (ET3) Model. (Accessed 7/13/2022).

This fact sheet provides instructions for Qualified Health Care Partners submitting claims for Treatment in Place services provided either on-scene or via telehealth using the ET3 payment model. Guidance is also relevant for use by downstream practitioners that are part of the practitioner agreement.

Centers for Medicare & Medicaid Services. (2022). [List of Telehealth Services](#).

This downloadable Excel file is a list of services payable under the Medicare Physician Fee Schedule when furnished via telehealth for coverage through 2022.

Centers for Medicare & Medicaid Services. (n.d.). [Medicare & Coronavirus](#). (Accessed 7/13/2022.)

This webpage provides general information on the coronavirus and lists what items and services are covered by Medicare, including virtual check-ins, vaccines, and testing.

Centers for Medicare & Medicaid Services. (2022). [Medicare Telemedicine Snapshot](#).

Prior to March 2020, Medicare paid for telehealth services under limited circumstances. In response to the COVID-19 pandemic, these services were expanded to increase access

to care. This snapshot includes data on the use of telemedicine for people with Medicare, specifically for services between March 2020 and February 2021.

Centers for Medicare & Medicaid Services. (2020). [Telehealth Benefits in Medicare are a Lifeline for Patients During Coronavirus Outbreak.](#)

This article explains how CMS has worked to advance virtual and telehealth services amid the COVID-19 pandemic. It underscores historical efforts, the major benefits of expanding coverage, and specific coverage information.

Centers for Medicare & Medicaid Services. (2021). [Telehealth Services.](#)

This short guide discusses the following in the context of reimbursable services: originating sites; distant site practitioners; telehealth services; billing and payment for professional services furnished via telehealth; billing and payment for the originating site facility fee; and includes a resource list for reference.

Infectious Diseases Society of America. (2020). [Telehealth and Virtual Care Services: Quick Reference Guide.](#)

This guide provides answers to frequently asked questions related to the provision of telehealth and virtual care services to Medicare beneficiaries during COVID-19.

*National Association of Community Health Centers. (2020). [Telehealth Implementation Quick Guide – COVID-19 Resource Packet.](#)

This resource packet provides guidance for health centers wanting to implement telehealth and virtual services within their organization. It includes information on telemedicine reimbursements, legal considerations, and operationalizing telehealth services, as well as provides clinical workflows.

National Consortium of Telehealth Resource Centers. (2020). [COVID-19 Telehealth Toolkit.](#)

This document provides a comprehensive overview of telehealth and details how it can be used in response to the COVID-19 pandemic. It includes information on policies, lessons learned, and lists additional relevant resources.

Physician-focused Payment Model Technical Advisory Committee (PTAC). (2020). [Overview & Summary of September 2020 Physician-Focused Payment Model Technical Advisory Committee \(PTAC\) Public Meeting Discussions on Telehealth.](#)

This report provides a summary on the feedback that the PTAC received from the public during its meeting on telehealth. The discussion included topics such as perspectives on the role telehealth can play in optimizing healthcare delivery and value-based transformation in the context of alternative payment models (APMs) and Physician-Focused Payment Models (PFPs). Additional information can be found in the following

documents: [Environmental Scan on Telehealth in the Context of APMs and PFPMs](#), and [Supplement to the Environmental Scan on Telehealth in the Context of APMs and PFPMs](#).

Physician-focused Payment Model Technical Advisory Committee. (2021). [Report to the Secretary of Health and Human Services. The Role of Telehealth in Optimizing Health Care Delivery and Value-based Transformation within Alternative Payment Models and Physician-focused Payment Models](#).

This report addresses the role of telehealth in “optimizing healthcare delivery” during the public health emergency, including the exponential increase in its use, the ability of providers using alternative payment models to adapt quickly, and its impact on improving access to care. It also identifies topics for future consideration.

*Shachar, C., Engel, J., Elwyn, G. (2020) [Implications for Telehealth in a Postpandemic Future: Regulatory and Privacy Issues](#). JAMA. 323(23): 2375-2376.

This article reviews the major changes that occurred in healthcare as a result of the COVID-19 pandemic. It discusses the issues, challenges, and benefits such as payment parity, patient privacy regulations, and licensing flexibilities.

*U.S. Department of Health and Human Services. (2009). [Pandemic and All-Hazards Preparedness Act \(Public Law 109-417\) Telehealth Report to Congress](#).

This report reviews the state of integrating telehealth capabilities into public health emergencies and disaster medical responses. It includes an overview of initiatives and summarizes the benefits, deficiencies, and challenges identified during that time.

*U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE).

Multiple reports from HHS ASPE include the following:

- Chu, R.C., Peters, C., De Lew, N., et al. (2021). [State Medicaid Telehealth Policies Before and During the COVID-19 Public Health Emergency](#).
- HHS ASPE. (2020). [Medicare Beneficiary Use of Telehealth Visits: Early Data from the Start of the COVID-19 Pandemic](#).
- Karimi, M., Lee, E.C., Couture, S.J., et al. (2022). [National Survey Trends in Telehealth Use in 2021: Disparities in Utilization and Audio vs. Video Services](#).
- Samson, L.W., Tarazi, W., Turrini, G., et al. (2021). [Medicare Beneficiaries’ Use of Telehealth in 2020: Trends by Beneficiary Characteristics and Location](#).
- Tarazi, W., Ruhter, J., Bosworth, A., et al. (2021). [The Impact of the COVID-19 Pandemic on Medicare Beneficiary Utilization and Provider Payments: Fee-For-Service \(FFS\) Data for 2020](#).

*U.S. Department of Health and Human Services, Health Resources and Services Administration. (n.d.). [Telehealth Webpage for Providers](#). (Accessed 7/13/2022.)

This webpage provides telehealth guidance for providers, including information on [best practices](#), and an overview of uses and summaries of COVID-19 related [policy changes](#), [billing](#), and [legal considerations](#).

*U.S. Senate. (2022). [Consolidated Appropriations Act, 2022](#).

On March 15, 2022, President Joe Biden signed into law the Consolidated Appropriations Act (CAA), 2022, which was passed by Congress on March 8, 2022. The CAA temporarily extends meaningful changes for reimbursement of Medicare services delivered via telehealth. All CAA provisions regarding telehealth amendments will last for 151 days following the expiration of the public health emergency.

IV. Implementation and Use of Telehealth Lessons Learned Resources

ASPR TRACIE. (2020). [Virtual Medical Care Topic Collection](#).

Resources in this Topic Collection highlight lessons learned from recent disasters and health emergencies. It includes information on strategies for implementing virtual medical care during a variety of scenarios. **NOTE:** Please review the entire [Event-Specific Lessons Learned](#) section to find specific telehealth lessons learned, relevant to disasters, that are not COVID-19 specific.

American Medical Association. (2021). [Telehealth: Lessons from the COVID-19 Pandemic](#).

This two-page document addresses geographic and site-of-service restrictions related to audio-visual technologies. It also includes key points for Congress to consider when ensuring telehealth services remain covered and available at the end of the current public health emergency.

ASPR TRACIE. (2021). [The Virtual Hospital at Home-Denver Health's Experience Treating COVID-19 Patients Remotely](#).

Denver Health is a Level 1 Trauma Center and Urban Safety Net hospital with 550 beds and nine federally qualified community health centers located throughout the city. Before the pandemic, the hospital had 227 adult medical surgery/critical care beds, forty-seven were intensive care unit (ICU)-level beds, and twelve were intermediate care beds. They ran near or at capacity and often experienced adult emergency department boarding. Patrick Ryan, MD, MPH, and Connie Savor Price, MD (from Denver Health and the University of Colorado School of Medicine) shared their experiences creating the “Virtual Hospital at Home” model to manage the significant surge in COVID-19 patients in the fall of 2020.

Association of State and Territorial Health Officials. (2021). [Using Lessons from the COVID-19 Response to Inform Telehealth Activities](#).

This brief provides examples of how various state and territorial health agencies are responding to COVID-19 through telehealth policy and operational changes.

Breuer, J., Friedberg, R. Keville, J., et al. (2022). [Telehealth and the Covid-19 Public Health Emergency: Lessons Learned, Opportunities Realized, and a Glimpse at Things to Come](#). American Health Law Association.

This brief details the impact of the pandemic on telehealth utilization from the perspective of a national telehealth provider. It discusses trends in demand, increased use of behavioral health services, health equity, and the future of telehealth.

Cheyenne Regional Medical Center. (2020). [Supporting Patients Through the Telehealth Process: Using Multifaceted Connected Healthcare](#).

This slide deck provides an overview of telehealth services provided during the COVID-19 pandemic at Cheyenne Regional Medical Center. It details the challenges, issues, and implementation solutions utilized by the organization.

Federal Interagency Committee on Emergency Medical Services. (2021). [Telemedicine Framework for EMS and 911 Organizations](#).

This resource provides guidance to EMS and 911 organizations on establishing telemedicine programs to expand services and healthcare capabilities. It includes information on implementation, knowledge building, stakeholder assessments, and program sustainment.

Greenway Health. (2022). [COVID-19: 5 Top Lessons Learned in Healthcare](#). Greenway Blog.

This resource identifies the top five lessons learned in healthcare during the COVID-19 pandemic from the perspective of a healthcare information technology vendor.

Greiwe, J. (2022). [Telemedicine Lessons Learned During the COVID-19 Pandemic](#). Current Allergy and Asthma Reports. 22, 1–5.

This article provides an overview of what went well and what challenges were faced as it pertains to the use of telehealth during the COVID-19 pandemic. The author notes that telemedicine has proven to be an effective tool that helped increase access to care and improve affordability for patients across various racial, economic, geographic, and technological demographics.

Harrison, M. (2020). [Marc Harrison's 7 Key Telehealth Lessons from the COVID-19 Pandemic](#). Advisory Board Daily Briefing.

In this briefing the president and CEO of Intermountain Healthcare identifies seven major lessons learned experienced by his organization during the COVID-19 pandemic.

Keshvaridoost, S, Bahaadinbeigy, K., and Fatehi, F. (2020). [Role of Telehealth in the Management of COVID-19: Lessons Learned from Previous SARS, MERS, and Ebola Outbreaks](#). *Telemedicine and e-Health*. 26(7).

In this resource, the authors detail the lessons learned from utilizing telehealth and telemedicine services during outbreaks of SARS, MERS, and Ebola.

Knierim, K., Palmer, C. Kramer, E.S., et al. (2021). [Lessons Learned During COVID-19 That Can Move Telehealth in Primary Care Forward](#). *Journal of the American Board of Family Medicine*. 34 (Supplement) S196-S202.

In this paper, the authors discuss telehealth-related lessons learned from the University of Colorado Health System's primary care practice during the COVID-19 pandemic. Topics include preparing for innovation, promoting an innovation mindset, standardizing practices, understanding technological innovation, and open communication.

Medscape Education. (2020). HHS Concept: Telemedicine in the New COVID-19 Landscape. WebMD. (Contact the [ASPR TRACIE Assistance Center](#) for a copy of this document).

This slide deck discusses the benefits and challenges of implementing telehealth amid the COVID-19 pandemic. It includes physician concerns, charts and graphs outlining demographic statistics, and rural versus non-rural data.

National EMS Advisory Council (NEMSAC). (2020). [Telehealth as a Strategy for EMS Care](#). Adaptability and Innovation.

This committee document highlights the benefits of telehealth and telemedicine services for EMS providers on-scene or enroute to a hospital. It includes recommendations from NEMSAC to the National Highway Traffic Safety Administration on audio-only telehealth use in remote areas and amending EMS education standards.

Office of the Assistant Secretary for Preparedness and Response. (2020). [Telehealth for Community-Based Organizations Webinar Series](#). U.S. Department of Health and Human Services.

This webpage provides links to the "Telehealth for Community-Based Organizations Webinars" developed by ASPR's At-Risk Individuals Program. This three-part series focuses on implementing telehealth services to address the access and functional needs of at-risk individuals in partnership with HUD during the COVID-19 pandemic.

Pande, A. (2022). [Lessons Learned from COVID-19 and the Future of Telehealth](#). HealthTECH.

This article presents several lessons learned related to the adoption of technology and the increased use of telehealth services during the COVID-19 pandemic. It also discusses actions taken to ensure a successful transition of staff to a working-from-home model.

Quinn, M., Lee, J., and Pamplin, J. (2021). [NETCCN: Delivering Needed Critical Care Expertise “From Anywhere, to Anywhere.”](#) (Contact the [ASPR TRACIE Assistance Center](#) for a copy of this document if there is difficulty in accessing it online).

This document provides an overview of the capabilities and successes of the National Emergency Tele-Critical Care Network (NETCCN) and outlines how it can be used for future all-hazard responses. More detailed information and additional resources are available at the following NETCCN website: <https://www.tatrc.org/netccn/>.

Scott, B.K., Miller, G.T., Fonda, S.J., et al. (2020). [Advanced Digital Health Technologies for COVID-19 and Future Emergencies](#). (Abstract only.) Telemedicine and e-Health. 26(10).

This article addresses how digital health technologies are being, or could, be used in the future for COVID-19 mitigation and suggests the use of the NETCCN as a resource to respond to future emergencies.

The Commonwealth Fund. (2021). [The Impact of COVID-19 on Outpatient Visits in 2020: Visits Remained Stable, Despite a Late Surge in Cases](#).

This report tracked outpatient office visits in 2020 to better understand the clinical impacts of the pandemic on outpatient care. Researchers analyzed visit volumes for more than 50,000 providers following shifts in pediatric visits, telemedicine volume, and policy changes as well as the financial effects on healthcare providers.

U.S. Department of Health and Human Services, Healthcare Resilience Task Force. (2020). Telemedicine Strategy. (Contact the [ASPR TRACIE Assistance Center](#) for a copy of this document).

This slide deck summarizes the major Telemedicine Working Group focus areas as part of a two phase strategy. These include, addressing telemedicine challenges in EMS and pre-hospital settings; hospitals and ambulatory care settings; and long-term care facilities.

U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response. (2020). [HHS Telemedicine Hack: Resources to Enhance Ambulatory Providers’ Telemedicine Implementation](#).

This handbook describes "life hacks" for five telemedicine categories including, general workflows and documentation; billing and reimbursement; clinical best practices and tele-physical exams; and making telemedicine part of your permanent practice.

*U.S. Department of Health and Human Services, Health Resources and Services Administration. (n.d.). [Telehealth Webpage for Providers](#). (Accessed 7/13/2022.)

This webpage provides telehealth guidance for providers, including information on [best practices](#), and an overview of uses and summaries of COVID-19 related [policy changes](#), [billing](#), and [legal considerations](#).

U.S. Department of Health and Human Services, Office of the Inspector General. (2021). [Most Medicare Beneficiaries Received Telehealth Services Only from Providers with Whom They Had an Established Relationship](#).

This study examined Medicare claims data for telehealth services provided from March through December 2020 to determine the percentage of beneficiaries who received services from providers with whom they had an established relationship. Policymakers can use this data to inform decisions about how best to utilize telehealth in Medicare. It can also be used to address concerns about fraud, waste, and abuse of telehealth services.

U.S. Department of Health and Human Services, Office of the Inspector General. (2022). [Telehealth Was Critical for Providing Services to Medicare Beneficiaries During the First Year of the COVID-19 Pandemic](#).

This study assessed Medicare fee-for-service claims data, and Medicare Advantage encounter data, from March 2020 to February 2021, and from the year prior. It determined the total number of services used via telehealth versus in-person and calculated the number of services provided during the first year of the pandemic. Results indicated that telehealth was critical in delivering services at the onset of the pandemic. The use of telehealth by beneficiaries demonstrated the long-term potential of increased access to healthcare and additional services such as behavioral care.

U.S. Government Accountability Office. (2022). [Medicaid: CMS Should Assess Effect of Increased Telehealth Use on Beneficiaries' Quality of Care](#).

Data from the GAO Analysis Center for Medicare and Medicaid Services showed that, in five states, over a one-year period, there was a marked increase in the number and percentage of telehealth services utilized among Medicaid beneficiaries that started at the onset of the COVID-19 pandemic. CMS recommends that additional analysis be conducted to understand the effects on quality of care and patient health outcomes.

U.S. Senate Committee on Health, Education, Labor and Pensions. (2020). [Telehealth: Lessons from the COVID-19 Pandemic](#).

This approximately 2-hour full committee hearing provides testimony from four healthcare professionals from around the U.S. on lessons learned utilizing telehealth during the COVID-19 pandemic.

Wilhite, J.A., Altshuler, L., Fisher, H., et al. (2022). [The Telemedicine Takeover: Lessons Learned During an Emerging Pandemic](#). *Telemedicine and e-Health*. 28(3).

The authors describe challenges, barriers, and lessons learned in implementing telehealth services during the COVID-19 pandemic.