Supporting Telehealth and Technology-assisted Services for People Who Use Drugs:

A Resource Guide

council for Mental Wellbeing



Table of Contents

Ackno	Acknowledgments1				
Comn	nonly Used Acronyms2				
Execu	tive Summary3				
Intro	duction4				
V	What is in this Resource Guide?4				
H	How to Use this Resource Guide5				
L	anguage Used in this Resource Guide5				
٨	Methods6				
li	mpact of COVID-19 on Telehealth and Technology-assisted Services for People Who Use Drugs6				
	Challenges to Using Telehealth and Technology-assisted Services10				
Plann	ing and Implementation Strategies13				
S	Strategy 1. Improve Participant Access to Technology13				
S	Strategy 2. Increase Participant Knowledge of and Comfort with Telehealth and Technology-assisted Supports17				
S	Strategy 3. Increase Staff Knowledge and Comfort using Telehealth and Technology-assisted Services22				
S	Strategy 4. Develop Partnerships to Strengthen Care Coordination and Team-based Care30				
S	Strategy 5. Finance and Sustain Telehealth and Technology-assisted Services33				
Concl	lusion37				
Appe	ndix A. Telehealth Glossary38				
Appe	ndix B. Provider Tips for Effective Virtual Interactions39				
Appe	ndix C. Strategies for Building Relationships Over the Phone40				
Appe	ndix D. Examples of Telehealth and Technology-assisted Services for PWUD41				
Appe	ndix E. Key Informants42				
Appe	ndix F. Resources and Tools43				
Appe	ndix G. References49				

Acknowledgments

The National Council for Mental Wellbeing developed this technical assistance tool with generous support from the Centers for Disease Control and Prevention (CDC). The project team would like to thank the key informants who devoted their time, expertise and resources to inform this report at a challenging time during the COVID-19 pandemic.

PROJECT TEAM

Shannon Mace, JD, MPH

Senior Advisor National Council for Mental Wellbeing

Anne Siegler, DrPH

Consultant
Anne Siegler, Inc.

KC Wu, MPH

Project Manager National Council for Mental Wellbeing

Margaret Jaco Manecke, MSSW, PMP

Director

National Council for Mental Wellbeing

Cate Gwin, MA

Former Project Coordinator National Council for Mental Wellbeing

Nancy Worthington, PhD, MPH

Health Scientist
Division of Overdose Prevention
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

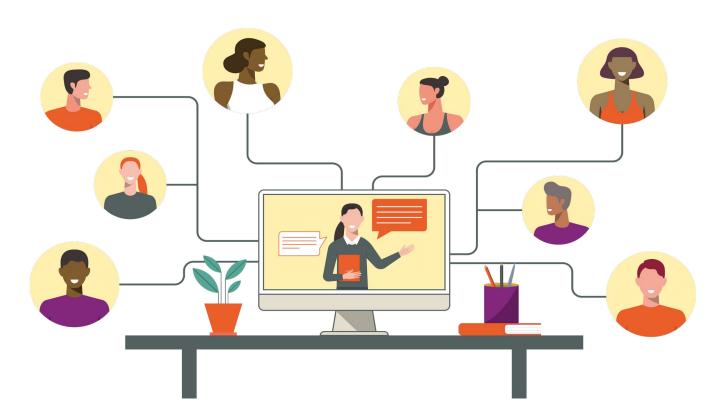
Brian Corry, MA

Public Health Analyst
Division of Overdose Prevention
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

Christina Meyers, MPH

ORISE Fellow
Division of Overdose Prevention
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

This publication was made possible by grant number 6 NU38OT000318-02-02 from the Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling \$750,000 with 100% funded by CDC/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement by, CDC/HHS or the U.S. Government



Commonly Used Acronyms

ССНР	Center for Connected Health Policy			
CDC	Centers for Disease Control and Prevention			
COVID-19	Coronavirus Disease 2019			
DEA	U.S. Drug Enforcement Administration			
FCC	Federal Communications Commission			
FDA	U.S. Food and Drug Administration			
ED	emergency department			
EMS	emergency medical services			
ннѕ	U.S. Department of Health and Human Services			
НІРАА	Health Insurance Portability and Accountability Act			
HITEQ	Health Information Technology, Evaluation and Quality Center			
mHealth	mobile health			
MOUD	medications for opioid use disorder			
ОТР	opioid treatment program			
OUD	opioid use disorder			
PWUD	people who use drugs			
SAMHSA	Substance Abuse and Mental Health Services Administration			
SMART	Self-Management and Recovery Training			
SNAP	Supplemental Nutrition Assistance Program			
SSI	Supplemental Security Income			
SSP	syringe services program			
SUD	substance use disorder			

Executive Summary

The COVID-19 pandemic exacerbated the social, economic and health conditions of people who use drugs (PWUD), leading to worsened outcomes, including increased rates of overdose and overdose death. The pandemic significantly disrupted organizations that serve PWUD, including harm reduction organizations and substance use disorder (SUD) treatment providers, and changed the ways in which services and supports are delivered. During the pandemic, many organizations that provide care to PWUD quickly transitioned from in-person services to telehealth and technology-assisted services, and this increased use of technology is expected to continue. These innovations have a variety of benefits to both participants and providers.

Implementing and sustaining virtual services, however, presents unique challenges distinct from in-person care, and has the possibility of exacerbating existing social and health inequities. Participant barriers to accessing and using technology, provider discomfort and lack of knowledge with telehealth and technology-assisted services, barriers to coordinated and team-based care, and regulatory and reimbursement policies that impact financing and sustainability have been identified as challenges to providing telehealth and technology-assisted supports. Furthermore, developing essential trusting relationships and connections with harm reduction and SUD treatment participants can be more challenging in a virtual environment. While many services can be delivered virtually, some services and supports for PWUD are more effectively delivered in-person. Virtual services should be viewed as a complement to in-person services, rather than a replacement.

To support organizations that provide care to PWUD, the National Council for Mental Wellbeing (National Council), with support from the Centers for Disease Control and Prevention (CDC), developed this resource guide organized by five strategies and related key considerations for implementing telehealth and technology-assisted services:

- 1. Improve participant access to technology.
- 2. Increase participant knowledge of and comfort with telehealth and technology-assisted services.
- 3. Increase staff knowledge and comfort using telehealth and technology-assisted services.
- 4. Develop partnerships to strengthen care coordination and team-based care.
- 5. Finance and sustain telehealth and technology-assisted services.

This resource guide aims to help harm reduction organizations, SUD treatment providers and other organizations that serve PWUD overcome challenges associated with implementing telehealth and technology-assisted services and leverage these advances to help improve the health and wellness of PWUD.



Introduction

The COVID-19 pandemic profoundly disrupted the lives of people who use drugs (PWUD) leading to worsened health, social and economic outcomes, including increased rates of substance use and overdose. The pandemic also led to significant disruptions and changes in the ways in which services and supports are provided to PWUD. Harm reduction organizations, substance use disorder (SUD) treatment providers and other organizations that provide care to PWUD rapidly transitioned to telehealth and technology-assisted services during the pandemic, and it is expected that this increased use of technology to provide care will continue. While telehealth and technology-assisted services are incredibly valuable to increasing access to services for PWUD, implementing and sustaining these services in ways that can meaningfully meet the needs of participants can be challenging. Furthermore, without specific attention to addressing social and health inequities, telehealth and technology-assisted services have the potential to exacerbate existing disparities in health and access to care. To support the use of telehealth and technology-assisted services for PWUD, the National Council for Mental Wellbeing (National Council), with support from the Centers for Disease Control and Prevention (CDC), identified five strategies informed by real-world experiences and research.

WHAT IS IN THIS RESOURCE GUIDE?

This resource guide offers recommendations, tools and examples from the field to better implement telehealth and technology-assisted services to increase access to care and improve outcomes for PWUD. Organized by five strategies, this resource guide is designed to address common challenges encountered when delivering telehealth and technology-assisted services. The selection of strategies was informed by the latest research and key informant interviews conducted with experts in the field.

Tools and resources in this guide include:

- Links to policy and regulatory guidance.
- Free training resources.
- Sample policies and protocols.
- Examples from the field.
- Planning and implementation checklists and quick tips.



HOW TO USE THIS RESOURCE GUIDE

This resource guide is organized into five strategies tailored to address common challenges experienced by providers and participants related to telehealth and technology-assisted services. Some of the strategies may be more relevant than others depending on the type of organization and the treatment or services offered to participants. The following strategies do not need to be implemented in the order they are presented.

- 1. Improve participant access to technology.
- 2. Increase participant knowledge of and comfort with telehealth and technology-assisted services.
- 3. Increase staff knowledge and comfort using telehealth and technology-assisted services.
- 4. Develop partnerships to strengthen care coordination and team-based care.
- 5. Finance and sustain telehealth and technology-assisted services.

LANGUAGE USED IN THIS RESOURCE GUIDE

Terminology related to both telehealth and substance use is continuously evolving. Throughout this resource guide, we have chosen to use certain terms to refer to the provision of virtual care services and to refer to PWUD who receive these services through harm reduction, SUD treatment providers and/or other organizations.

Telehealth and technology-assisted services: The scope of virtual and remote care services has rapidly increased in the last decade, introducing a variety of new technologies, services and terms to describe virtual care modalities. For purposes of this resource guide, we use "telehealth and technology-assisted services" to describe the provision of virtual care and services broadly. This term is meant to encompass not only treatment services that are provided by clinicians and billable (commonly known as "telemedicine"), but also the wide range of ways technology has been leveraged to provide services and supports to PWUD, including conducting outreach and education, providing peer support services and facilitating harm reduction supply distribution, among many others. Other terms relating to specific types of telehealth or technology-assisted services are also used when discussing specific types of services. A glossary of terms related to telehealth and technology-assisted services can be found in Appendix A. Telehealth Glossary.

Participants: The importance of using non-stigmatizing, person-first language when discussing issues related to substance use has become clear through research and more importantly, as expressed by people with lived experience. As the public health field adapts to the usage of preferred language, terms may change, and multiple terms may be commonly used to refer to the same thing. For purposes of this resource guide, we will use "participants" when referring to people receiving services from harm reduction programs or SUD treatment programs. We will use "patients" when referring to specific language used in policy or regulatory guidance and in direct quotes. We recognize that not all PWUD have a SUD or need SUD treatment. For more information on non-stigmatizing language, see Shatterproof's Addiction Language Guide.



METHODS

To inform this resource guide, between April and September 2021, National Council staff conducted a mixed-methods review, including a scan of published literature and web-based materials and key informant interviews with harm reduction and SUD treatment providers.

Literature Review

Published peer-reviewed, white and grey literature was reviewed between April and September 2021. Additionally, because the impacts of the COVID-19 pandemic were evolving at the same time data were collected, efforts were made to expand inclusion of resources that reflected real-time experiences and insights, such as national webinars, organizational educational materials and news media, among others.

To identify and analyze existing literature and information, keyword searches were conducted within research databases and on the websites of national harm reduction and SUD treatment provider organizations, government agencies and national technical assistance provider organizations, among others. Documents in languages other than English or focused on countries other than the U.S. were not included in the review.

Key Informant Interviews

In the spring of 2021, project staff conducted key informant interviews with leaders and providers from harm reduction organizations, SUD treatment programs and other organizations that serve PWUD. Key informants were purposively sampled to include a broad array of experiences with providing telehealth and technology-assisted services to PWUD.

To facilitate the interviews, a semi-structured interview guide was developed. Interviews took place using Zoom videoconferencing software and were approximately one hour in duration. Interviews were recorded and transcribed with the consent of the participants. A \$75 electronic gift card was offered to each participant as an incentive for completing the interview. Interview data were coded in vivo, using sentences and phrases directly from interviewees to develop key themes using grounded theory. Codes were then analyzed for patterns and relationships.

A total of 10 key informants were interviewed. Key informants represented diverse geographic locations, including urban and rural areas, and served diverse communities and groups. All key informants were providers or administrators who serve PWUD in a variety of different contexts, including but not limited to direct clinical care, phone-based counseling and mail-based provision of supplies. Most key informants were providers who served a local community, while a few provided statewide and national services.

IMPACT OF COVID-19 ON TELEHEALTH AND TECHNOLOGY-ASSISTED SERVICES FOR PEOPLE WHO USE DRUGS

The COVID-19 pandemic led to a dramatic increase in the use of telehealth and technology-assisted services by organizations that provide care to PWUD. According to a nationwide survey conducted in July 2020 with 770 mental health and SUD treatment providers, 99% of survey respondents reported that they introduced new or expanded existing telehealth or technology-assisted services in response to the pandemic.¹⁰

Furthermore, 79% of respondents reported that their organization planned to continue using telehealth and technology-assisted services beyond the period of the pandemic, 20% were uncertain if use would continue and only 1% reported that their organization would not continue to use the services.11 Mental health and SUD treatment provider key informants noted that the continuation of telehealth services within their organization beyond the period of the pandemic would be largely driven by whether reimbursement for telehealth services would also continue.12 A significant increase in the adoption of telehealth and technology-assisted supports among harm reduction organizations is also demonstrated in existing literature.13 For more information on the impacts of COVID-19 on harm reduction organizations, including the use of technology to support participants, see COVID-19 Pandemic Impact on Harm Reduction Services: An Environmental Scan.14

While most harm reduction organizations and SUD treatment providers have transitioned many services to virtual platforms during the COVID-19 pandemic, telehealth and technologyassisted services should not be viewed as a replacement for in-person care. When used appropriately, telehealth and technology-assisted services can enhance care and expand access to a range of services, supports and treatment for PWUD; however, in-person interactions between participants and providers should remain available as an option whenever possible. Offering both in-person and virtual services helps to reduce inequities among harm reduction participants who lack the resources necessary to engage in virtual care.

"There are people for whom a text conversation or a phone call is not going to work and having that [interaction] inperson – whether it's a delivery, meetup or scheduled visit – it's really undeniable. We want to live in a world where every single town, every single county has access to an in-person syringe access program. I'm holding on to the idea that we want multiple options for everyone."

- Harm Reduction Provider

Telehealth-related Regulatory and Policy Changes During COVID-19

The COVID-19 pandemic catalyzed numerous state and federal regulatory changes to increase access and remove barriers to telehealth services, reducing risk of COVID-19 transmission. While many of these changes impacted telehealth services generally, some specifically addressed the provision of SUD treatment and services. Several COVID-19 relief packages that were enacted by Congress also increased funding to support telehealth services, such as the Coronavirus Preparedness and Response Supplemental Appropriations Act, Families First Coronavirus Response Act, CARES Act and American Rescue Plan Act of 2021, among others. Additionally, private and public insurers adapted policies to expand reimbursement for services delivered via telehealth during the pandemic.

The Substance Abuse and Mental Health Services Administration (SAMHSA) and Drug Enforcement Administration (DEA) implemented regulatory changes to the prescribing of controlled substances, which includes methadone and buprenorphine treatment for opioid use disorder (OUD). The following exemptions will continue for the period of the national emergency declared in response to the COVID-19 pandemic.

On March 16, 2020, SAMHSA issued guidance waiving the requirement for an in-person evaluation prior to initiating new patients on buprenorphine by DATA 2000 waivered prescribers. Prior to this waiver, an in-person evaluation was required to initiate buprenorphine treatment; however, patients could be treated remotely for subsequent visits. With respect to new patients treated with buprenorphine at opioid treatment programs (OTPs), SAMHSA preemptively exempted OTPs from the requirement to perform an in-person physical evaluation (under 42 C.F.R. § 8.12(f)(2)) for any patient who will be treated by an OTP with buprenorphine if a program physician, primary care physician or authorized health care professional under the supervision of a program physician determines that an adequate evaluation of the patient can be accomplished via telehealth. This exemption applies only to treatment with buprenorphine, not methadone, from OTPs.

The guidance also allows methadone prescribing via telehealth for existing patients; however, new patients are still required to undergo an in-person evaluation. The DEA issued further guidance on March 31, 2020, stating that buprenorphine can be prescribed by telephone during the COVID-19 public health emergency.

For more information on regulatory changes that impacted telehealth for SUD treatment services, see the American Society for Addiction Medicine's Supporting Access to Telehealth for Addiction Services: Regulatory Overview and General Practice Considerations and SAMHSA's FAQs: Provision of methadone and buprenorphine for the treatment of Opioid Use Disorder in the COVID-19 emergency. For information on other federal regulatory changes related to telehealth during the COVID-19 pandemic, see the Center for Connected Health Policy's (CCHP) COVID-19 Telehealth Coverage Policies.

In addition to federal regulatory changes, many states adapted regulations and policies to increase access to telehealth services. Examples of state actions include requiring certain commercial health plans to reimburse for telehealth services, updating standards of practice for telehealth and increasing access to broadband to support telehealth, among others.¹⁷ For state-specific policy

actions to remove barriers to telehealth, see the CCHP's COVID-19 Related State Actions.

Insurance reimbursement policies were also updated to support the expanded use of telehealth during the pandemic. Medicare, Medicaid and some commercial insurers expanded coverage for telehealth services, including telephone-only visits, as reimbursable for certain services. ^{18,19} For more information related to telehealth reimbursement during the COVID-19 pandemic, see the U.S. Department of Health and Human Services' (HHS) Billing for Telehealth during COVID-19.

Telehealth and Technology-assisted Services Utilization among Harm Reduction Organizations and Substance Use Disorder Treatment Providers

Prior to the pandemic, adoption of telehealth and technology-assisted services by SUD treatment providers and harm reduction organizations was increasing slowly. Between 2010 and 2017, one study estimated only 0.1% of all SUD-related visits were delivered via telehealth among people with commercial insurance.²⁰ Another study of more than 12,000 SUD treatment providers in the U.S. showed an increase in the use of telehealth nationwide from 13.5% to 17.4% between 2016 and 2019.21 However, SUD treatment providers' utilization of telehealth varied widely by state, ranging from 5% to 44%.22 There is less information available about nationwide adoption of technology-assisted services within harm reduction organizations prior to the pandemic; however, there are a number of examples of emerging technologyassisted harm reduction interventions that were implemented by some organizations pre-dating the pandemic. Examples include online and mailbased harm reduction supply delivery, vending machine supply distribution, telehealth linkage to care, text-based communication and messaging, virtual social support groups, hotlines for safe consumption, virtual injection supervision and wearable devices, among others. 23, 24, 25, 26 Utilization of telehealth and technology-assisted services among SUD treatment providers and harm reduction organizations greatly increased during the COVID-19 pandemic. See Appendix D. Examples of Telehealth and Technology-assisted Services for PWUD for a non-exhaustive list of examples of telehealth and technology-assisted services for PWUD currently used in the field.

Harm Reduction Technology-assisted Services Utilization during the COVID-19 Pandemic

The use of technology by harm reduction organizations expanded significantly during the COVID-19 pandemic.²⁷ Many harm reduction organizations transitioned to mail-based and contactless supply delivery to reduce risk of COVID-19 transmission through in-person interactions and implemented online platforms or phone- and text-based hotlines for participants to request supplies.^{28, 29, 30} Organizations that previously offered in-person support groups transitioned to virtual platforms, such as Zoom.³¹ In addition to services provided by community-based harm reduction organizations, several hotlines and mobile applications have been developed and expanded upon to provide virtual injection supervision and peer support services.^{32, 33, 34} Because social distancing protocols directly contradict harm reduction's messaging to "never use alone," these virtual tools were developed and expanded upon to prevent overdose and other substance use-related harms among PWUD.³⁵

"[Technology] has been in some ways really the cornerstone of us being able to operate the statewide program."

- Harm Reduction Provider

Substance Use Disorder Treatment Telehealth Utilization during the COVID-19 Pandemic

In response to the changes to telehealth-related regulations during the pandemic, SUD treatment providers and harm reduction organizations have expanded the use of telehealth to maintain engagement with current participants and to reach new participants. Despite decreases in access to other types of medications for opioid use disorder (MOUD), such as methadone, during the pandemic,³⁶ access to low-threshold buprenorphine treatment using telehealth has increased, and partnerships between SUD treatment providers and harm reduction organizations have demonstrated success in engaging participants in MOUD care. 37, 38, 39, 40, 41 A study conducted by Jones and colleagues of waivered prescribers nationwide found that among 7,419 clinicians who prescribed buprenorphine in the past 12 months, 33% reported conducting remote prescribing to new patients without an in-person examination.⁴² Respondents also reported that they used a range of technologies to engage new patients, including laptop or desktop with video (54%), telephone without video (54%), telephone with video (46%) and mobile tablet with video (19%).43 Nearly 80% of respondents reported they did not prescribe buprenorphine remotely prior to the pandemic.44 Many harm reduction organizations have also partnered with SUD treatment providers to link participants to MOUD treatment virtually. During the pandemic, organizations implemented innovative adaptations to maximize the use of telehealth to increase access to MOUD.45

While evidence relating to the effectiveness of telehealth-only MOUD is limited due to restrictions prior to the COVID-19 pandemic, there is strong evidence to support the effectiveness of MOUD delivered through a hybrid approach of in-person and virtual care, including reductions in rates of positive drug screens.^{46, 47, 48} Some treatment providers also reported a decrease in

participant discharges due to appointment absences, as many participants are more easily able to access their appointments via telehealth. Although existing research is limited, studies show that participant satisfaction with MOUD delivered via telehealth is high and comparable to participants receiving MOUD in-person.^{49, 50, 51}

Additionally, key informants expressed several benefits of telehealth-only MOUD treatment delivery, including eliminating geographic barriers to care; overcoming barriers rooted in stigma, shame and discrimination; and avoiding re-traumatization among participants who may be able to access in-person MOUD services only in settings, communities or neighborhoods in which they have negative associations. In these ways, telehealth can be a tool to reduce health inequities.

"[Participants] had in the past come to the harm reduction organization's office, but the office is in a neighborhood that can be very triggering for them because they have a lot of memories of drug use there. So, not having to come to the neighborhood can be very good for some of them."

- Buprenorphine Treatment Provider

"Even offering a patient the option, 'Do you feel comfortable being in the same room with the medical provider?' I think sometimes patients can get claustrophobic. They feel too much pressure. So, a telephone booth might be preferable to some patients, to not have someone staring at you. . . . A lot of patients, especially females, have a history of trauma and might be uncomfortable alone in a room with a male provider. There could be a lot of benefit in having just a safe place to talk on the phone with someone."

- Buprenorphine Treatment Provider

A growing number of advocacy and provider organizations are calling for the temporary pandemic-related regulatory changes to become permanent to increase access to MOUD services beyond the period of pandemic.^{52, 53, 54} More information about the role of policy advocacy to sustain increased access to telehealth for MOUD can be found in Strategy 5. Finance and Sustain Telehealth and Technology-assisted Services.

"I think telehealth really addresses access issues related to geography, transportation or scheduling issues. . . . Telehealth just makes it a lot more accessible."

- Buprenorphine Treatment Provider

Recovery and Peer Support Technology-assisted Services Utilization during the COVID-19 Pandemic

Recovery, peer support and social services have also largely transitioned to virtual platforms during the pandemic and utilization of existing mobile technologies to support these services has increased significantly. Examples of technology-assisted recovery and peer support services include mobile health (mHealth) interventions that measure digital biomarkers of substance craving and offer dialectical behavioral therapy; a phone-based adaptation of Self Management and Recovery Training (SMART); recovery-specific virtual social networks; and virtual adaptations of mutual help and peer-based support, including one-on-one support and groups. 55, 56, 57 In response to the increase in technology-assisted peer support services (also known as digital peer support), at least one training and certification program has been developed in recent years to increase peer support specialists' competencies related to using technology for delivering peer support services. 58

While existing evidence is limited, virtual peer support, recovery and mutual aid services have been shown to have potential benefits to participants.⁵⁹ For example, online SMART Recovery meeting participation was correlated with improved number of days abstinent from drinking alcohol in a study conducted by Campbell and colleagues.⁶⁰ Key informants also noted that virtual meetings and groups increased access to support among participants who would not feel as comfortable attending in-person gatherings.

"Most of those [mutual aid groups] are being done on Zoom and a lot of my patients who do it say they like it better. I know a lot of them if they get in, they're doing AA and NA on Zoom and they said it's so much better. . . . If you are in a group, you don't have to say anything, but you're still getting the support and discussion. They really do like it because it also can be scheduled much easier. If they are working or have a part-time job, you can work around it better on Zoom than you can when you have a class set up."

- Buprenorphine Treatment Provider

Furthermore, one key informant reported a significant increase in utilization of a safer use hotline throughout the pandemic.

"We started [the safer use hotline] in September of 2019, so we were only up about five, six months before lockdown stuff happened. First it was people calling to see if it was a real thing or not. And then we started getting calls in slowly, very slowly. One or two a week at first, and then COVID hit, and it went from just one or two a week, to one or two a day, and then three or four a day. Now I think we're up to 15, 20, 25 on an average day. A slow day might be 10 or 15, a busy day, 25 or 30."

- Hotline Administrator



CHALLENGES TO USING TELEHEALTH AND TECHNOLOGY-ASSISTED SERVICES

Undoubtedly, telehealth and technology-assisted services have helped improve access to care and support for PWUD; however, implementing these services can be challenging. Furthermore, because developing trusting relationships and fostering connection is a vital component of care for PWUD, some services are better suited to be delivered in-person or through a combination of in-person and virtual supports. Additional challenges related to implementing telehealth and technology-assisted services noted by harm reduction and SUD treatment providers include participant barriers to accessing and using technology, provider discomfort and lack of knowledge with telehealth and technology-assisted services, barriers to coordinated and team-based care, and regulatory and reimbursement policies that impact financing and sustainability. 62, 63, 64, 65, 66

Participant Barriers to Accessing and Using Technology

Participant barriers to accessing and obtaining technology have been noted as a primary challenge to delivering telehealth and technology-assisted services to PWUD. Although research supports that most SUD treatment participants have access to a mobile phone, ⁶⁷ considerable disparities related to technology access and use persist in the U.S. related to age, race and ethnicity, income level, disability status and geography. People with lower incomes are less likely to own a smartphone, own a computer or have access to broadband internet compared to people with higher incomes.⁶⁸ For example, only 59% of people with household incomes of \$30,000 a year or less reported having a desktop or laptop computer, compared to 92% of people with household incomes of \$100,000 or more. 69 Black and Hispanic people own computers at lower rates than White people (58% and 57% compared to 82%) and have less access to broadband internet access at home (66% and 61% compared to 79%).70 Among people living in rural communities, 63% report having access to broadband internet at home, 71% have access to a smartphone and 69% have access to a computer.⁷¹ People with disabilities, regardless of their age, have less access to computers, smartphones and broadband internet access at home compared to people without disabilities.⁷² Among SUD treatment participants, consistent access to a mobile phone number and annual phone contract has been shown to be higher among White participants and participants with higher educations.73 Additionally, fewer than half of SUD treatment participant respondents have been shown to have access to computers, internet and email, which was significantly lower than mobile phone access (91%).74

While telehealth and technology-assisted services have been important to maintaining access to care and services for PWUD during the pandemic, participant barriers to access persist. Providers must employ an equity lens to ensure that the use of telehealth and technology-assisted services does not exacerbate pre-existing disparities. Harm reduction organizations and SUD treatment providers often serve participants who do not have reliable access to a working phone or internet connection, who have limited minutes or data on their phone plan or who lack access to a regular place to charge their devices, making it challenging to engage in telehealth, technology-assisted services and digital communication.^{75,76,77} Inadequate infrastructure and technology, including a lack of broadband to support the

delivery of telehealth and technology-assisted services, has also been identified as a barrier to implementation, particularly in rural areas.^{78,79,80}

"I could not teach my grandpa how to use a smartphone at this point. But for a lot of the clients at the syringe exchange, they're younger, they sometimes have smartphones and are pretty fast. The barrier is having a phone that is charged."

- Service Coordinator

Some participants may need to borrow another person's phone to engage in virtual care, raising concerns related to privacy and confidentiality and continuity of care. Additionally, unlike in a clinical environment that is somewhat controlled, participants may engage in phone visits from their homes, with family members present, or in public places, raising additional concerns related to privacy and confidentiality. Further, people who are experiencing houselessness and housing instability — particularly during the pandemic when many drop-in centers, libraries and other places are closed — may find it challenging to find a location to regularly charge their phones.

"One of the syringe programs stopped having their services inside. You could exchange your syringes, but it was outside, and you couldn't stay. So, people couldn't charge their devices anymore. A lot of people had used the program's chargers and Wi-Fi to be able to make other appointments. At one point we asked ourselves, 'How do we give people chargers? How do we get people electricity?' The infrastructure, especially for people who aren't housed, having telephones that they can use, let alone anything that can actually access real telemedicine, is just very fragile."

- Service Coordinator

Participants with less familiarity or comfort with mobile phones and mobile applications may face challenges in downloading and accessing programs used to deliver telehealth and technology-assisted services. As with inperson visits, people who are experiencing instability in their daily lives may find it difficult to keep a telehealth appointment at a specific date and time, and these challenges are exacerbated if the participant is relying on the use of someone else's technology to engage in services. Additionally, people experiencing instability may frequently obtain new phones and new phone numbers, adding to the challenges of continuity of care.

"[Successful telehealth appointments] involve things going right for both people: myself and my technology, and the patient and their technology. The patients I serve, they don't have access to Wi-Fi, they don't have access to a computer. However, more often they have access to a phone."

- Buprenorphine Treatment Provider

Provider Discomfort with and Lack of Knowledge of Telehealth and Technology-assisted Services

Some harm reduction and SUD treatment providers may be uncomfortable with using telehealth or technology-assisted services to provide care for several reasons, including lack of experience and training and discomfort with the limitations of virtual care. Provider access and skill with technology was cited by 27% of survey respondents (n=153) as a challenge in a nationwide study analyzing mental health and SUD treatment providers' experiences using telehealth and technology-assisted services during the pandemic. Elimitations related to virtual care noted by SUD treatment providers include difficulty completing an accurate physical exam or physical observations; a lack of user-friendly technology; difficulty obtaining Health Insurance Portability and Accountability Act (HIPAA)-compliant technology; an inability to draw labs or conduct urine toxicology screenings; a loss of connection with the participant; concerns about privacy and confidentiality; and technological difficulties that disrupted the flow of visits. 83, 84, 85, 86

"For anyone who's stable, having a quick call with your provider is a quick way to keep getting your medication. It's the in-between people, right. Where I'm not sure....are they taking their medicines? Are they struggling? It's a little bit more difficult to know. Equally importantly, if we weren't doing a visit by phone and instead they had to come to clinic: would they have the ability to come or would they be unable to come, and hence, have a worse outcome?"

- Buprenorphine Treatment Provider

Harm reduction provider key informants also noted that it is more difficult to explain complex information to participants virtually, such as describing laws and risks related to substance use.

"Sometimes it is challenging to feel like you've fully communicated with the person about the complexity of the laws and the risks. Sometimes it feels so much clearer in person. Like when you have an in-person conversation, you can really get that message across. But I feel like there are moments [virtually] when I'm like, did that person really understand what I meant?"

- Harm Reduction Provider



Barriers to Coordinated and Team-based Care

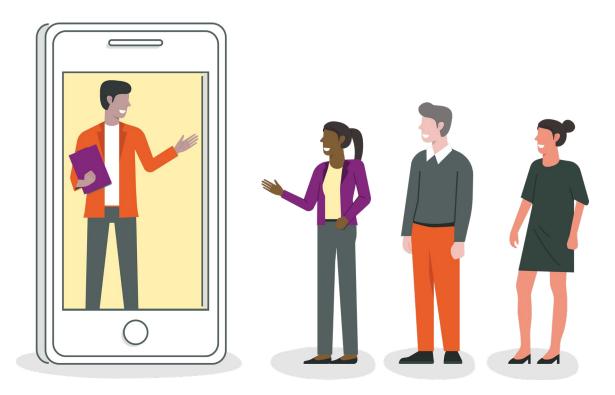
Some harm reduction and SUD treatment providers also identified challenges related to effectively providing coordinated and team-based care to participants when using telehealth and technology-assisted services. Buprenorphine prescribers who transitioned to using telehealth during the pandemic expressed concerns related to the ability of participants to access complementary services, such as counseling or peer support services, in the community or virtually.⁸⁷ Additionally, the need for partnerships with harm reduction and other community-based organizations to effectively refer and link people, especially people experiencing houselessness or housing instability, to telehealth MOUD and other treatment was noted as a concern.⁸⁸ Some SUD treatment providers also reported that transitioning to telehealth impeded their ability to provide team-based care and changed team dynamics, such as conducting consultations and having informal case discussions with other colleagues.⁸⁹ Providers have also found that developing social connections is more challenging in a virtual environment, which can impact opportunities for peer and mutual support and for developing trusting relationships between providers and participants.

"There's no space for patients to congregate together, like drop-in centers or clinic waiting rooms. We used to have all the patients in the program in the waiting room together and we'd have previous graduate participants come in and talk to them. We have one older woman in her 80s who is a legend, and she would run informal groups in the waiting room and patients got to talk about strategies, shortcuts, barriers and successes. So that was definitely a loss. . . the ability to build strong community amongst participants."

- Buprenorphine Treatment Provider

Regulatory and Reimbursement Challenges

Existing state and federal regulations and reimbursement policies have challenged the adoption and implementation of telehealth and technology-assisted services among SUD treatment providers and harm reduction organizations, particularly related to providing MOUD. Although many regulations and reimbursement policies have been temporarily changed during the COVID-19 pandemic and increased access to telehealth, it is unknown whether these changes will become permanent. Regulatory challenges cited by SUD treatment providers include requiring in-person evaluations prior to prescribing controlled substances mandated by the Ryan Haight Online Pharmacy Consumer Protection Act and state laws restricting telehealth for the treatment of OUD, such as restrictions related to types of services, locations and settings that are eligible for Medicaid reimbursement.⁹⁰



Planning and Implementation Strategies

To better support organizations that provide telehealth and technology-assisted services to PWUD, the following five strategies can help to overcome common challenges, including participant barriers to accessing and using technology, provider discomfort and lack of knowledge with telehealth and technology-assisted services, barriers to coordinated and team-based care and regulatory and reimbursement policies that impact financing and sustainability. The following strategies were informed by key informant interviews with subject matter experts from the field and existing research and literature. A complete list of key informants who participated in interviews can be found in Appendix E. Key Informants.

STRATEGY 1. IMPROVE PARTICIPANT ACCESS TO TECHNOLOGY

To overcome participant barriers to accessing technology, harm reduction organizations and SUD treatment providers can implement programs that provide mobile devices to participants, offer opportunities for participants to keep their devices charged, and offer spaces for participants to engage in telehealth in a private setting. Additionally, to address issues related to a lack of stable internet connections when conducting outreach and education in rural areas, harm reduction providers can download mobile apps and videos on mobile phones or tablets prior to going into the field.⁹¹

Improve Participant Access to Devices and Broadband

Some harm reduction organizations provide mobile phones free-of-charge or loan technology to participants to help them connect with telehealth care providers, peer support and other services and supports, including accessing information and participating in daily activities, such as employment. Many of these programs are supported through private philanthropic, state and federal grant funding. Harm reduction and SUD treatment organizations can also connect participants to existing programs that increase access to affordable technology and broadband for people with low incomes, such as the Lifeline, Emergency Broadband Benefit and other programs. Additionally, community-based organizations that serve PWUD can host mobile phone drives to support access to devices.

"The phones that we get for folks are flip phones with a basic talk and text plan, and we give technical assistance as needed. We set up the phones with pre-paid plans in advance. We also put the SIM [subscriber identity module] cards in place and add a bunch of key phone numbers and contacts into the phones in advance. For example, we give them the phone with our hotline number and clinical services team members' numbers locked in to the contacts already. That has definitely helped. We then re-up the plans every month as needed, so long as folks haven't lost the phones and/or the phone hasn't been broken or stolen."

- Harm Reduction Provider





Example from the Field: Harm Reduction and Bridges to Care Clinic

In Portland, Ore., the Harm Reduction and Bridges to Care Clinic (HRBR) opened in October 2019 and rapidly transitioned to providing more than 90% of services virtually in late March 2020. HRBR provides on-demand, low-barrier SUD treatment, including walk-in access for MOUD. To reach participants who did not have access to technology to support telehealth and other virtual services, HRBR worked with local syringe services programs (SSPs) and harm reduction outreach workers. HRBR partnered with Outside In and the Portland People's Outreach Program to offer participants technology and engage them in services, including through bicycle outreach and mobile syringe exchange programs.⁹²

"Because of some of the changes to SAMHSA around telehealth, and buprenorphine and medication-assisted treatment, we were able to partner with our local bridge clinic for Suboxone, and so now we're able to get people started on medication for their addiction from the exchange. A huge barrier for the communities we serve is lack of technology. Telemedicine appointments are very hard if you don't have a phone, or there's nowhere to plug in your phone. Being able to provide folks, you know they can come in and use our tablet to do their medical appointment from my office. We've been able to get a fair number of people linked to medication for their substance use disorder just from the exchange, based on changes to SAMHSA rules."

- Service Coordinator

Lifeline Program

Lifeline is a national program that provides a discount of up to \$9.25 toward monthly home or mobile phone service or high-speed broadband. People living on Tribal lands may be eligible for additional benefits. People are eligible for Lifeline if their incomes are 135% or less than the federal poverty guidelines based on household size, or if a household member participates in a federal assistance program, such as Supplemental Nutrition Assistance Program (SNAP), Medicaid, Supplemental Security Income (SSI), Federal Public Housing Assistance, Veterans Pension and Survivors Benefit or Tribal programs. Lifeline discounts are limited to one per household.⁹³ To qualify for Lifeline, applicants may need to show proof of income or proof of participation in a federal assistance program.⁹⁴ However, during the COVID-19 emergency, certain income eligibility requirements have been waived.⁹⁵ Lifeline applicants can apply online, by printing and mailing an application (English and Spanish language applications are available) or by contacting their existing mobile provider directly to see if they participate in the Lifeline program.⁹⁶

Emergency Broadband Benefit

Another program for which some harm reduction and SUD treatment participants may be eligible is the Emergency Broadband Benefit, which provides a discount of up to \$50 per month toward eligible households and up to \$75 per month for families living on Tribal lands.⁹⁷ The program also provides a one-time discount of up to \$100 for a laptop, tablet or desktop computer.⁹⁸ Households are eligible for the discount if they meet **one** of the following criteria:

- Income at 135% or below the federal poverty guideline.
- Existing participation in SNAP, Medicaid, or the Lifeline program.
- Approved to receive benefits from the free and reduced-price school lunch program or school breakfast program.
- Received a Federal Pell Grant during the current award year.
- Experienced a substantial loss of income due to job loss or furlough since February 29, 2020, and the household had a total income in 2020 at or below \$99,000 for a single filer or \$198,000 for joint filers.
- Meets the eligibility criteria for existing low-income COVID-19 programs.⁹⁹

To apply, applicants can contact participating broadband providers directly, apply online at GetEmergencyBroadband.org, print and mail a paper application (applications available in English or Spanish) or call 833-511-0311. For more information on the Emergency Broadband Benefit, see these Frequently Asked Questions.

Verizon HopeLine Programs

The HopeLine program, established by Verizon, offers free mobile phones to people who are experiencing or have experienced domestic violence. Because intimate partner violence is linked to substance use, with some studies finding over 70% of domestic violence shelter residents in need of substance use-related services 100, 101, 102 connecting harm reduction participants to services and programs for survivors is important. Verizon partners with community-based organizations nationwide to host phone drives in which community members can donate old phones that are then refurbished and provided to people through the partnering nonprofit organization. Examples of organizations Verizon has partnered with to implement the HopeLine include Family Violence Prevention Fund and the National Coalition Against Domestic Violence. 103 Harm reduction and SUD treatment providers can partner with existing HopeLine programs to link eligible participants to mobile phone services.



PCs for People

PCs for People is a nonprofit organization founded in 1998 focused on digital inclusion by increasing access to computers and broadband among people with low incomes. PCs for People collects computers from businesses through an electronic recycling service, securely wipes the computers of any data and then refurbishes the technology for redistribution.104 PCs for People offers desktops and laptops for sale at discounted prices online and in stores in six states in the U.S. (Minnesota, Colorado, Ohio, Maryland, Missouri and Illinois). 105 People who have incomes at or below 200% of the federal poverty guideline or who are enrolled in an income-based government assistance program are eligible for PCs for People technology.106 In addition to providing technology directly to people in need, PCs for People partners with nonprofit organizations through its Bridging the Gap program to provide nonprofits and their participants access to low-cost technology and broadband. Currently, Bridging the Gap partners are located in 47 states. To apply to become a PCs for People Bridging the Gap partner, see the PCs for People partner application.

In addition to providing mobile technology directly to participants, harm reduction and SUD treatment providers can assist participants with completing applications for the Lifeline program, Emergency Broadband Benefit and other programs, including helping participants submit the necessary documentation to support their applications.



Key Consideration: Mobile Phone Programs

Unfortunately, stigma and discrimination against PWUD persist, leading to the misperception that PWUD or people with low incomes do not need technology or will not use it as intended. Because providing free mobile phones to PWUD may seem like an unconventional intervention to some people or organizations, harm reduction and SUD treatment providers may need to take time to explain why having access to mobile phones is critical for PWUD not only to engage in telehealth services, but also to stay connected to support-related social networks, to use in emergency situations and to participate in other daily activities, including employment or education. Additionally, because resources are often limited, organizations must make decisions about how mobile phones will be distributed to participants. Organizations should establish clear guidance and protocols prior to implementing programs. Program guidelines should be informed by participants and should be clearly communicated to participants, so they are aware of what will happen if, for example, they lose the phone they are provided.

"There are huge gaps in having a phone, having phone service and having Wi-Fi among participants. And one of the things that we've talked about is, there are some providers who say, 'I will always give people a phone' and then there's the group of people that say, 'But they'll lose it, or it gets stolen or they won't have it.' And the others say, 'I'll keep giving them phones. That's fine. Then there are more people that have phones.' There are different camps of people when it comes to who gets technology. And there's a lot of stigma in a lot of these conversations. Around access to technology, there's still some interesting conversations there that are hard, and there's no easy answer because everything's expensive."

- Service Coordinator

Support Participant Technology Use

In addition to supporting participants' access to mobile devices, harm reduction and SUD treatment providers can provide safe spaces for participants to charge their phones and engage in telehealth visits in a private and confidential manner. During the COVID-19 pandemic, when most in-person services were suspended, providing access to these types of spaces was particularly challenging. However, some organizations identified creative and adaptive ways to overcome risks related to close contact indoors, including the Homeless Health Care Los Angeles Center for Harm Reduction's Telephone Booth program, described below.



Example from the Field: Homeless Health Care Los Angeles Center for Harm Reduction's Telephone Booth Model

Homeless Health Care Los Angeles, a buprenorphine program that provides MOUD to SSP participants, developed an on-site "telephone" booth" model so that participants could continue to receive services throughout the pandemic, even those without reliable access to a phone, in a safe and socially distanced manner.¹⁰⁷ Two small rooms near the entrance of the organization's building were equipped with a desk, a chair, a telephone, a high-efficiency particulate air filter and privacyfrosted glass. Participants completed a pre-screening to assess their treatment needs and were then invited to enter the booths, where they could communicate over the phone with their physician, social worker and drug counselor. Staff had initially considered computers and video visits, but ultimately opted for the most straightforward, easiest possible way of delivering services. For participants who were in quarantine or isolation due to the COVID-19 pandemic and were unable to leave their residences, mobile phones were dispensed. An evaluation showed that after an initial drop in enrollment and visits at the beginning of the COVID-19 pandemic, utilization rates returned to pre-pandemic levels with the development of the telephone booth. 108

STRATEGY 2. INCREASE PARTICIPANT KNOWLEDGE OF AND COMFORT WITH TELEHEALTH AND TECHNOLOGY-ASSISTED SUPPORTS

In addition to supporting access to technology for participants, harm reduction and SUD treatment providers play an important role in helping participants use and feel comfortable with using technology to engage in services. Many providers offer participants information in advance of virtual visits and help participants prepare by having a pre-appointment conversation with a care coordinator or other team member. Harm reduction and SUD treatment providers should also take steps to ensure that participants from different backgrounds and with different technology-related needs have the necessary supports to comfortably engage in telehealth and technology-assisted services. Examples of supports are discussed in this section. Additionally, providers are encouraged to create virtual education and outreach materials that are relevant to the diverse communities served by the organization.

"In the calls that I've had with patients that are using telemedicine, they said, 'You know, the first few times it was really clunky, but then you start getting the hang of it.' I think people are finding, if you have the set-up the first time, it's just going to get easier."

- Service Coordinator



Help Participants Prepare for Virtual Visits

To increase participants' comfort with using technology to engage in care, harm reduction and SUD treatment providers can offer step-by-step guidance from a care coordinator or other team member prior to a visit with a clinician. In addition, organizations can offer participants educational information in advance to help them better prepare for their visits. Participant tips for a telehealth visit (adapted from NSI Strategies) and telehealth and technology resources for participants, including examples of materials that organizations can adapt, can be found below.

Participant Tips for a Telehealth Visit¹⁰⁹

Preparing Your Physical Space for Your Appointment

- Is your phone, computer or other device charged or powered?
- Is your internet connection reliable?
- Are you in a comfortable and private place?
- Test your camera to be sure it has a clear view for the provider. Avoid sitting in front of a bright window because that can obscure the view for the provider.
- Use headphones or earbuds if you have them. Test your speaker and volume to make sure you can be heard.

- Turn off device alerts and notifications so you won't be distracted during the visit.
- Have paper and a pen on hand and be ready to take notes.
- We will be virtually visiting you in your environment and if we are on camera, we will be able to see more than just you. Be mindful of your background view. If you are in your home, please be aware of the items that are in the video background, such as pictures. Some of these things are personal and private, and we want to do everything to support your privacy and boundaries.

Preparing Yourself for the Appointment

- What to wear? Please wear the same clothes as if you were coming into the office. We want to be sure everyone's boundaries are respected, so please do not wear pajamas or nightwear.
- Where to be during your appointment? We ask that you find a comfortable place in a seated position. To keep everyone safe, visits won't be conducted while you are driving or engaged in other activities like shopping or operating equipment. If you share a space with others, it can be helpful to ask them if they are willing to give you privacy during the appointment.
- Bring your medications and any health information that is important to share during the visit.





Example from the Field: Ophelia's Online Opioid Use Disorder Treatment

At Ophelia, an entirely online provider of MOUD currently available in multiple states, participants are connected with a care coordinator, nurse care manager and a prescribing clinician via telehealth.¹¹⁰ This service is able to serve participants in rural areas who may not live near a buprenorphine provider, as well as participants who may not be comfortable talking to a provider about their substance use in person. To overcome barriers associated with participant familiarity and comfort with technology, such as lack of experience with telehealth technology and procedures, participants meet first with a care coordinator. During this meeting, the care coordinator walks the participant through downloading the application and each of the steps, explaining how the appointment with the clinician will work. If there is a problem with their phone or the application, care coordinators will work through it in these pre-visits. By the time the clinician meets with the participant, there are very few issues with the technology. For any outstanding issues or new issues that arise, a care coordinator is also available in real time to help solve the problem.

"We have a lot of patients who say, 'I saw your ad on Facebook. I never would have talked to anyone about my substance use. No one knew, so no one would have referred me [to MOUD]. I saw this, and it was very discreet and that's why I'm here."

- Buprenorphine Treatment Provider



Telehealth and Technology Resources for Participants

- Telehealth: What to Know for Your Family (Centers for Medicare and Medicaid Services)
- Tips to Keep Your Telehealth Visit Private (The Center of Excellence for Protected Health Information)
- How to Prepare for a Video Appointment with Your Mental Health Clinician (American Psychiatric Association)
- How to Prep for Your Telehealth
 Appointment (90-second animated video;
 Heartland Telehealth Resource Center)

Offer Services that Support Inclusion of All Participants

When using telehealth and technology-assisted services to support PWUD, it is important for providers to understand that one size does not fit all. Organizations and providers should remain flexible in their approach to virtual care and should ensure that a variety of assistive services and supports are available to people who may benefit from them. Most importantly, organizations should solicit input and feedback from participants from all backgrounds to better understand how services can be improved upon to meet participants' unique needs. A non-exhaustive list of strategies to increase access to telehealth and technology-assisted services to some groups follow; however, organizations should seek input from the range of communities they serve to identify other ways to ensure they are inclusive.



Engaging People with Disabilities

While telehealth and technology-assisted services can help increase access to care for people with different needs and abilities, it can also be challenging or inaccessible for many people. Harm reduction and SUD treatment providers should ensure that people with disabilities are able to access all offered services, including telehealth and technology-assisted supports. Creating outreach and education materials that are accessible to all people, providing additional support or adaptations during telehealth and virtual visits and linking participants to accessible technologies will help create a more inclusive and welcoming environment and experience for participants with disabilities. Common examples of supports available to people with different needs and disabilities when using telehealth and technology-assisted supports are below; however, providers should always discuss with participants what assistance, if any, would be most helpful. For more information about providing telehealth for people with disabilities, see HHS' Improving Access to Telehealth. Additionally, for information about creating accessible digital tools and complying with federal guidelines, see Section 508.

Supports for People Who are Blind or Who have Low Vision

- Qualified readers.
- Information available in large print, Braille, or electronically for use with a computer screen-reading program.
- Audio recordings of printed information.

Supports for People Who are Deaf or Who have Hearing Loss

- Qualified notetakers.
- Qualified sign language interpreters.
- Real-time captioning.
- Written materials or printed scripts.
- Mobile applications that may be useful for people who are deaf include:
 - » AVA (provides live captioning)
 - » Google Live Transcribe
 - » Rogervoice (captioning service for phone calls)
 - » Signly (provides synchronous, in-vision sign language translations of webpages)

Supports for People with Speech Disabilities

- Qualified speech-to-speech translators.
- Suggesting the participant type or write out words.
- Staff should listen attentively and politely ask a participant to repeat a word or phrase they did not understand.¹¹¹

To help people choose mobile phones that offer accessible features — such as larger text, magnifier, voice over, text telephone (TTY), captions and voice assistant, among others — Verizon offers a chart that compares commonly available Apple, Samsung and other devices.



Engaging Older Adults

While some older adults may not be as familiar with newer technologies and may have less access to technology, it is important not to make assumptions about older adults or anyone else and their ability to use telehealth. Harm reduction and SUD treatment providers should check in with all participants to assess their comfort with using technology to identify ways to best support them. Older adults and other participants who may be new to the technology being used may benefit from being comforted and reassured throughout the process.¹¹² Additionally, telehealth providers can help increase older adults' comfort with technology by linking them to existing training and educational resources. For example, to help older adults more easily navigate virtual services, the Michigan Department of Health and Human Services' Aging and Adult Services Agency partnered with GetSetup, a technology company, to develop a catalog of live and recorded classes through the Michigan Learning Channel on various topics related to using technology. The website offers 350 different live and interactive classes on topics such as Using your Android Smartphone, iPhone Basics, Telehealth: How to Have a Virtual Visit with Your Doctor and Get Started with Zoom for Beginners, and many others. 113 During the COVID-19 pandemic, the classes are free for participants; and while the service is primarily focused on older adults in Michigan, anyone can register and take the classes.114

Engaging People who Speak Languages Other Than English

It is important to ensure participants who are not conversant in Englishhave access to telehealth and technology-assisted supports and care. Tips for improving access to people who speak languages other than English are below. The Pacific Basin Telehealth Resource Center developed a Translation Tool Kit, which offers easy-to-understand instructions on how to use Zoom for smartphones, Zoom for computers, and Doxy.me in several languages, including Chuukese, English, Ilocano, Korean, Marshallese, Samoan, simplified and traditional Chinese, Spanish and Tagalog. The National



Consortium of Telehealth Resource Centers has a catalog of Translated Resources available in several different languages. Additionally, the Health Information Technology, Evaluation, and Quality Center (HITEQ) offers a comprehensive resource, including recommendations and resources for providing telehealth to people who speak languages other than English in Telehealth Strategies and Resources for Serving Patients with Limited Proficiency.



Tips for Providing Telehealth and Technology-assisted Supports to People Who Speak Languages Other Than English¹¹⁵

- Because technology literacy can vary by language skill, comfort with technology and age, it is useful to identify household member or friend to help set up telehealth or technology access.¹¹⁶ However, ensure that others are not present for the visit unless the participant has given explicit permission for them to be there.
- Whenever possible, use a professional interpreter or translation service during telehealth and technology assisted visits with participants. Examples include:
 - » Boostlingo
 - » Certified Languages International
 - » Language Line Solutions
 - » Propio
- Use technology functions that support effective interpretation, for example Zoom Language Interpretation.
- Offer illustrated instructional materials on how to use telehealth and technology-assisted supports in languages other than English.
- Have a practice session with participants prior to their appointment to make sure they are comfortable with the technology.
- Make efforts to employ staff who are bilingual and speak the languages commonly spoken in the community.



Example from the Field: Hennepin Healthcare

When the COVID-19 pandemic began, Hennepin Healthcare administrators in Minneapolis knew that most patients had access to technology based on their community needs assessment; however, it became apparent that many did not know how to use their technology to engage in telehealth services. To overcome language and literacy barriers to telehealth, Hennepin Healthcare staff updated their translated materials to make sure the language they were using would resonate with patients. They also created toolkits for patients, both print and video-based, that were translated into Spanish and Somali and written at a fourth-grade literacy level. Providers asked patients to review the toolkits 48 hours in advance of their telehealth visit. Following the implementation of the toolkits, Hennepin Healthcare experienced an increase in telehealth visits by people who speak languages other than English from 2% to over 12%.¹¹⁷ See Hennepin Healthcare for an example of instructional videos for patients.¹¹⁸

Leverage Technology for Outreach, Mobile Services and Linkage to Care

Technology is an essential tool for conducting outreach, providing mobile services and linking participants to care. Recorded web-based videos on topics such as administering naloxone could be used to reach a broader audience than inperson trainings. Additionally, recorded trainings and educational videos can be stored on mobile devices and shared with participants in the community who may not have reliable access to the internet or organizations that lack a physical office location. Furthermore, social media can be used to increase awareness of available services to a broad audience.

While technology is commonly used to support these activities by harm reduction organizations and SUD treatment providers, there are several ways to maximize the benefits of technology and minimize any risks, particularly related to privacy and confidentiality. Because outreach and engagement services may be the first time a potential participant encounters an organization, it is important that the person feels welcomed by the organization and comfortable with the services offered, including telehealth and technology-assisted services.



Technology Tips for Outreach and Engagement and Mobile Services¹¹⁹

- Have at least one dedicated mobile phone or phone number for the program.
- One designated staff member should carry the dedicated phone or be able to receive calls during program hours (for example, using call forwarding services, such as Google Voice).
- During off-hours, the outgoing voicemail message should provide:
 - Clinic hours and locations.
 - » An alternate phone number (if available) to connect with staff.
 - » A reminder that protected health information should not be left on voicemails.
 - » Information about how to contact a clinician (if applicable) or emergency services.
- Offer text messaging as a method to communicate with participants and potential participants to reach people who may be more comfortable with texting.
- Notify people that text messaging is not considered secure under HIPAA and that no protected patient information should be shared via text.
- Use social media and other digital communications to provide information about the available services and resources.

Additionally, when developing virtual outreach and education materials, it is important that the materials convey a sense of trustworthiness and relatability, especially if a prior trusting relationship has not been developed between the organization and potential participants. Virtual outreach materials not only provide an opportunity to convey information or educate intended recipients, but can also be used to introduce potential participants to organizational staff and promote a better understanding of the values of an organization. Vizing the sense of the state of the sense of th

-`_'-

Tips for Creating Virtual Outreach and Education Materials¹²²

- Clearly state when services, supports and activities are confidential and private.
- Clearly state when services, supports and activities are not confidential or private.
- Ensure outreach and education materials are culturally relevant and appropriate for intended communities and informed by PWUD and people with lived experience.
- When developing virtual training videos, feature people who reflect the diversity of the community being served, including race, ethnicity and gender.
- When developing virtual training videos, use credible messengers who are trusted by the intended audience to deliver information. For example, messages delivered by peers may be better received than by health care providers or authority figures.
- Use photos or videos of only those people who provide explicit consent.
- Include contact information for people to be able to reach out to someone directly with questions or concerns.
- Offer virtual outreach and education materials in the languages spoken in the community.
- Offer virtual outreach and education materials that are accessible to people with disabilities and people who are deaf or blind.
- Offer a way for people to contact the organization anonymously, when possible.
- Never use stigmatizing language or images in outreach and education materials.

STRATEGY 3. INCREASE STAFF KNOWLEDGE AND COMFORT USING TELEHEALTH AND TECHNOLOGY-ASSISTED SERVICES

Because the use of telehealth and technology-assisted services may be new for some care providers, it is important that staff are comfortable with using technology and knowledgeable about best and promising practices delivering virtual care. To improve staff knowledge and comfort related to virtual care, organizations should provide staff training and education opportunities, develop operational guidelines and protocols and protect participants' privacy and confidentiality. It is also important for providers to recognize the limitations of virtual care and adapt policies and practices accordingly.

Provide Staff Training and Education

While technology is increasingly being used to deliver services, evidence-based and best practices related to virtual services for PWUD have not been standardized widely. Providers serving PWUD encounter unique challenges related to delivering services and can benefit from education, training and peer support on how to address specific situations in virtual environments. For example, SUD treatment providers have expressed concerns related to conducting physical observations and exams virtually.¹²³

Recommended training and education topics for staff working with PWUD include, but are not limited to:

- Preparing for virtual services.
- Etiquette for engaging in virtual services.
- Developing trusting relationships virtually.
- Conducting virtual physical observations.
- Protecting privacy and confidentiality in virtual settings.

Additionally, as telehealth and technology-assisted services are increasingly being used among health care and social services providers, there are a growing number of specialized training and certification programs available focused on the unique considerations related to delivering services in virtual environments. Examples of resources are provided below and can be found in Appendix F. Resources and Tools.



Example from the Field: Digital Peer Support Certification

Digital Peer Support, an organization focused on advancing virtual peer support programs that "promote collaboration, engagement, shared decision-making, principals of reciprocal relationships, co-learning, partnership, trust, transparency and honesty," created a certification training program to equip peer support specialists with the skills and knowledge necessary to provide effective services in virtual environments.¹²⁴ The Digital Peer Support Certification is a 15-hour virtual course that offers instruction on a variety of topics, including, but not limited to:

- Digital communication skills.
- How to select peer support technologies using a decision-support tool.
- Promoting engagement of participants with technology.
- Technology literacy.
- Privacy and confidentiality.
- Practice and feedback sessions using engagement techniques.
- How to address a digital crisis.
- Special populations.

In addition to the 15-hour Digital Peer Support Certification, there is an on-demand rapid four-hour Digital Peer Support Certification course. The company also offers two lower-cost on-demand paid trainings: Digital Peer Support Supervision and Supporting Older Adults Remotely. They also offer a free recorded training on the topic of Digital Peer Support Supervision and a Peer Support App Database.

The National Center for Complex Health and Social Needs and the Center for Health and Social Care Integration identified several tips for providers, described below, to prepare for the delivery of tele-social care that can be adapted for providers serving PWUD through telehealth or technology-assisted services. For additional provider training and education tools on how to effectively deliver virtual and telephonic services, see Appendix B. Provider Tips for Effective Virtual Interactions and Appendix C. Strategies for Building Relationships Over the Phone.



Tips for Preparing for Telehealth and Technology-assisted Services¹²⁵

- Include both formal and informal touchpoints in intervention.
 - » Formal touchpoints could include assessments and evaluations.
 - » Informal touchpoints could include check-in calls and brief updates.
- Anticipate and mitigate privacy and confidentiality concerns for the provider and the participant.
 - » Confirm with the participant that they are in a quiet, private space prior to discussing sensitive topics.
 - » Confirm with the participant that their health information (in their possession) is secure and out of reach of others, if possible.
 - » Confirm whether the telephone being used by the participant belongs to them or another person.

- Plan ahead when working with interpreters.
 - Ensure the interpreter understands who the participant is and what to do if someone else answers the phone.
 - Provide the interpreter with the exact information that should be left on a voicemail, if any.
- Leverage a variety of communication mechanisms.
 - Where possible, supplement telephonic-only communication with in- person, virtual video interactions or text reminders.
- Use your work phone whenever possible, so participants recognize the number.
 - Participants may not answer an unknown number; therefore, if possible, personalize your caller ID so it appears as if you are calling from an office location.
- Translate self-awareness to telephonic interactions.
 - Prior to making a call, ask yourself, "What am I bringing to this interaction and how does that affect my ability to engage with this person?"
- Have a plan for crisis management.
 - » Be prepared to initiate a 3-way phone call with emergency services or other response team if necessary.
 - With the participant's permission, ask them to identify their location at the beginning of the call and ask them if there is anyone else there to support them in case of a crisis, such as an overdose. Be clear about what you will do with the information they provide you prior to asking them for their location.
- Have clear call and voicemail protocols.
 - » Clearly establish how many attempts will be made to reach a participant, whether to leave voicemails and specify a phone number for participants to reach providers.
 - » Do not leave any information on a voicemail that could endanger a participant or violate their privacy, such as health information.
- Establish a referral network and conduct warm handoffs whenever possible.
 - With permission from the participant, communicate with referring providers and service partners regularly.
 - » Ensure referring partners and providers are giving participants accurate information about how to access services.
- Anticipate technology issues.
 - » Conduct a run-through with a colleague before using new virtual platforms or technology.

- » Inform the participant what will happen if the technology fails or the call is lost (for example, calling the participant back).
- Identify issues that may cause confusion during a telephonic-only interaction with no visual information.
- If engaging with a participant via video platform, provide instructions on how to access and use it.
 - » Volunteers or navigators can assist participants with virtual appointments.
 - » Develop easy-to-understand guides or instructions on how to use technology platforms if needed.



Training and Education Resources for Providers

- Telehealth, MOUD and COVID-19 (1-hour recorded roundtable discussion; Providers Clinical Support System)
- Telehealth for the Treatment of Serious Mental Illness and Substance Use Disorders (Evidence-based resource guide; SAMHSA)
- Training and Technical Assistance Related to COVID-19 (SAMHSA)
- Best practices and strategies for tele-social care (1-hour recorded webinar; Center for Health and Social Care Integration
- Digital Peer Support (Offers free and low-cost virtual training and certification programs)
- Virtual Care Learning Hub (Catalog of resources related to providing virtual care)
- Empathic Communication in Virtual Practice (1-hour recorded webinar; Center for Care Innovations)
- Telemedicine for Health Equity Toolkit (Center for Care Innovations)

Develop Operational Guidelines and Protocols

Developing operational guidelines and protocols helps standardize best practices for telehealth and technology-assisted supports across the organization and offers staff detailed information on how to effectively engage with participants virtually. Each organization's protocols and guidelines may differ based on the types of populations served and the resources and capabilities within the organization, among other factors. Key considerations when developing operational guidelines are below.



Key Considerations for Developing Operational Guidelines and Protocols

- How many times should staff attempt to contact participants?
- What information should staff leave on a voicemail, if any?
- What should happen if a participant's phone line is disconnected?

- How should participants contact staff?
- Should staff provide participants their personal numbers?
- How should staff introduce themselves during a telephonic or virtual visit?
- What type of language should be used in virtual communications (e.g., when texting, is it appropriate for staff to use abbreviations or emojis when communicating with participants)?
- What services or supports are in place to connect with participants who are deaf, blind or have disabilities?
- What services or supports are in place to connect with participants who speak languages other than English?
- How will paperwork or forms be completed and submitted by participants?
- How should staff assess for privacy and confidentiality issues?
- Which services can be delivered virtually and which must be delivered in-person?
- How should staff respond if the participant experiences a crisis during a virtual visit?
- How should digital communications, such as text messaging or email, be used between staff and participants?
- What kind of information should not be shared through digital communications, such as text messaging or email?



Example from the Field: Unity Recovery Telerecovery Guide and SOP

Unity Recovery, a recovery community organization based in Philadelphia that provides virtual peer support services and recovery meetings, developed a Telerecovery Guide and SOP (standard operating procedure) for staff. The guide outlines various protocols for staff when providing virtual services, including remote intake procedure, guidance on communicating digitally, remote initial recovery plan procedure, remote follow-up engagements procedure and remote referral procedure, among others.¹²⁶

Protect Participants' Privacy and Confidentiality

Ensuring participants can share information safely and without risk of public or unauthorized disclosure to third parties is critical whether services are delivered in-person or virtually; however, there are additional key considerations related to the use of telehealth and technology-assisted supports. When engaging in telehealth and technology-assisted services, providers should take steps to comply with federal and state regulations, protect participants' privacy during virtual visits and digital communications and ensure digital platforms protect users' privacy.

"We're trying to do as much as we can through the phone to educate people about the laws and the risks [of using technology for substance use-related care and activities]. That's been challenging but has actually educated a lot of people about the importance of encrypted messaging and not just for acquiring harm reduction supplies, but for acquiring drugs and other things that people are doing that hopefully can help mitigate some of the risks of criminalization. Connecting with people via technology has been a way to inherently talk to people about how they're using technology in other aspects of survival — drug selling, drug buying, and life."

- Harm Reduction Provider

Regulatory Compliance

During the pandemic, the HHS Office of Civil Rights announced that it would waive certain penalties for HIPAA noncompliance related to providing telehealth services during the COVID-19 pandemic.¹²⁷ Covered health care providers who use audio or video technology to provide care during the pandemic are temporarily allowed to use any non-public-facing remote communication platform that is available for communicating with participants, even if the platform is not HIPAA-compliant. Applications such as Google Hangouts video, Zoom and Skype are included within the exception.¹²⁸ While certain enforcement actions related to using non-HIPAA-compliant technologies are currently relaxed, providers must still act in good faith and cannot use public-facing applications, such as TikTok, Facebook Live, or a public chat, to provide telehealth services.¹²⁹

For more information on federal regulatory compliance related to SUD treatment via telehealth during the pandemic, see the Center of Excellence for Protected Health Information's Telehealth and Privacy: Federal Guidance for SUD and Mental Health Treatment Providers and the Network for Public Health Law's FAQ: COVID-19 and Health Data Privacy.

Protecting Participants' Privacy during Virtual Visits

While certain penalties related to HIPAA noncompliance have been waived, providers should continue to take precautions to protect participants' privacy and confidentiality. Providers have limited control over participants' environments when delivering virtual services; however, there are steps they can take to better protect participants' privacy and confidentiality.



Tips for Protecting Participants' Privacy during Virtual Visits¹³⁰

- Obtain participants' consent to discuss confidential matters prior to raising any subjects that may put the participant at risk of unwanted disclosure.
- Clearly state when services, supports and activities are confidential and private and when they are not confidential or private.
- If using video, scan participants' surroundings to the extent possible to see if there are any people present who may be able to hear or see the virtual visit.
- Ask the participant if there are any other people present in the room with them.
- If there are others present, ask the participant if they can go to a private space.
- Explain to the participant how to mute audio or disable video if they are interrupted during their visit.
- If the participant is unable to go to a private space to engage in services, offer other ways to communicate with the participant that might offer more privacy, such as audio-only communication.
- Discuss with the participant at the outset of the virtual visit what they would like to happen if the call or video visit gets disconnected (e.g., should the participant call the provider back, should the provider call the participant).



Ensure Digital Platforms Protect Privacy

There are a number of digital platforms and applications that protect people's privacy and many are HIPAA-compliant. As noted previously, federal regulations related to HIPAA-compliant software were also relaxed during the pandemic. Increasingly, PWUD are engaging in harm reduction services and supports using a wide range of virtual platforms and software. For example, a growing number of harm reduction organizations now accept requests for harm reduction supplies via text messaging and online. Disclosures of participants' names and addresses could put them in danger; therefore, it is critical that safeguards, such as data encryption, are used when accepting identifying and personal information. Table 1, adapted from HITEQ, provides technology recommendations based on their ability to protect people's privacy.

"When the policies first changed, everyone was asking, 'What technology can we use? How can we use it? Can we use FaceTime or other apps or platforms? How do we do this? What's the best way to do this?' And then it became more and more clear that [the regulations] were more flexible than we thought. ... The confusion about it didn't last for very long."

- Buprenorphine Treatment Provider

Table 1. Technologies for Providing Telehealth during the COVID-19 Pandemic¹³¹

Do not Use for Telehealth	Permissible During the Public Health Emergency	More Secure Options	
Any public-facing video communication applications (for example, live streaming).	The following can be used during the public health emergency, but providers should notify participants of privacy risks. Encryption and privacy modes should be used when available.	The following applications have been identified by the HHS Office of Civil Rights as HIPAA-compliant.	
Facebook Live	Apple FaceTime	Amazon Chime	
Instagram Live	Facebook Messenger video chat	Cisco Webex Meetings/ Webex Teams	
TikTokTwitch	Google Hangouts video	Doxy.me	
I witch	SkypeZoom	Google G Suite Hangouts Meet	
		■ GoToMeeting	
		Microsoft Teams	
		Skype for Business	
		Updox	
		■ VSee	
		Zoom for Healthcare	

While it is important to ensure harm reduction organizations and other SUD providers are using secure digital platforms, these platforms may not be accessible or suitable for all participants. Applying a participant-centered harm reduction approach to the use of technology – where the participant, when informed, is trusted to choose the platform of communication that works best for them and may not always be the most private or secure – is critical. Providers noted the need for a wider lens of costs and benefits to the participant, keeping in mind digital security but also likelihood and ease of use of services and harm reduction supplies more generally.

"The biggest thing that we've learned has been the importance of having flexibility and a willingness to really be okay with harm reduction for technology. . .. So I have to be comfortable and trust that the participant understands their own levels of risk and is making the best decision that's right for them. Technology throws in a new dimension and one that we don't experience with in-person services."

- Harm Reduction Provider

Online Mail-based Harm Reduction Supply Distribution Services

In addition to ensuring that the safest applications and software are being used for video visits and digital communication, it is critical that participants' privacy is protected as much as possible when using technology to order harm reduction supplies online. Organizations should take steps to keep participants' identifying information (for example, names and addresses) separate from any information related to their substance use. Additionally, participants should be made aware of any risks associated with the use of unsecure systems. When mailing supplies, consider using a nondescript return mailing address that does not indicate the package came from a harm reduction organization. For example, one organization uses only their initials and a P.O. Box return address. For best practices related to online mail-based harm reduction supply distribution, see NEXT Distro's Mail-Based Syringe Access During COVID-19 guide.

"When we mail supplies, our return address does not say our organization's name. It does not have a physical address that's associated with our organization. No one could get that package and Google it and figure out who we are. All of that has to be thought out. And I think that its still a learning process because we still get feedback from participants so that we can make it better. We're existing within not just criminalization, but also stigma. It is all legal, but there's still stigma."

- Harm Reduction Provider



Example from the Field: NEXT Distro

NEXT Distro is a national online and mail-based harm reduction service that provides free naloxone and other harm reduction supplies to PWUD.¹³³ NEXT Distro prioritizes reaching people who live in areas with little or no access to in-person harm reduction services, and partners with a network of affiliate organizations in 35 states to mail supplies. A key aspect of NEXT Distro's success has been the development of a secure, encrypted online platform where participants can order supplies in a discreet manner.¹³⁴ Participant enrollment data, such as names and addresses, are not connected to substance use-related information. When participants enroll to request supplies, they are connected through a chosen "handle" and are encouraged to use encrypted messaging applications, such as Signal, when communicating with the program.¹³⁵ Since its inception in 2018, over 30,000 packages of harm reduction supplies have been mailed to all 50 states and Puerto Rico. When the COVID-19 pandemic began, stay-at-home orders were put in place and many syringe services programs shut down, leading to a dramatic increase in the need for mail-order harm reduction supplies.

"The biggest thing that we've learned has been the importance of having flexibility and a willingness to really be okay with harm reduction for technology. . .. So I have to be comfortable and trust that the participant understands their own levels of risk and is making the best decision that's right for them. Technology throws in a new dimension and one that we don't experience with in-person services."

- Jamie Favaro, Founder of NEXT Distro

Recognize the Limitations of Telehealth and Technology-assisted Services

While telehealth and technology-assisted services are a valuable tool for care delivery, it is important to recognize that there are limitations to virtual care. In addition to access barriers among participants, certain types of services may be better delivered in-person or may not be feasibly delivered virtually for some participants. For example, some participants may not be able to receive mail-based or mobile harm reduction supplies. Harm reduction and SUD treatment providers have also identified physical observations, wound prevention and care, and urinalysis as specific services that can be challenging to deliver in a virtual environment. Additionally, some providers have found that it is more difficult to build social connections with participants virtually. Social connections have therapeutic value, particularly in harm reduction and SUD services where stigma and mistrust are prevalent. Social connections between providers and participants can lead to increased service retention, engagement in care and linkage to care and treatment. To overcome some of these challenges, organizations have adapted and reconsidered protocols, such as routine urine drug testing. ^{136, 137} Organizations should assess their protocols regularly and make adjustments as needed, based on providers' and participants' experiences with virtual care.

"What you don't do on a phone visit is drug test. And for some people, that test helps them meet their goals. I have had multiple people with terrible outcomes who I thought were doing great. I've had people who on the phone will say, 'Oh yeah, I'm doing great, I'm feeling good.' And I've said, 'Cool, keep up the good work.' And then the next thing you know, they're in the hospital with endocarditis, they're losing limbs because they stayed at home so long that their sepsis was so bad, they lost blood flow to parts of their limbs and they have had to be amputated. That's happened with multiple people that I've taken care of. At the same time: if the phone visit hadn't been an option, would they have had zero care, and had an even worse outcome? Or would they have come to clinic, received more support sooner, and had a better outcome?"

- Buprenorphine Treatment Provider

"We are actually mailing people [urinalysis] cups and having them do the urine in their house. We don't watch, it's not observed. They show us the cup in the camera during the visit before and after collecting their sample. . . . And then where do they take their urine? They don't take it anywhere. They just show us the cup [with the result]. We just have them show us and then they just throw the cup away."

- Buprenorphine Treatment Provider

The telehealth and technology-assisted strategies that harm reduction organizations and SUD providers implemented during the COVID-19 pandemic have helped to meet participant needs while keeping both participants and staff at low risk of exposure to COVID-19. However, some strategies will not meet everyone's needs. Some key informants suggested that those who are missed by these strategies may be those who need services most.

"We miss the people who are most vulnerable, who have so many challenges in their day that they can't set up that delivery. We definitely have participants who are unhoused, who we tell, 'We know every Tuesday we're going to meet in this parking lot at 4:45.' We got that figured out. But there are a lot of people who can't do that and for so many reasons that we understand."

- Buprenorphine Treatment Provider

STRATEGY 4. DEVELOP PARTNERSHIPS TO STRENGTHEN CARE COORDINATION AND TEAM-BASED CARE

To support and strengthen care coordination, team-based care and social supports for participants within telehealth and technology-assisted programs, harm reduction and SUD treatment providers should develop partnerships with community-based organizations, recovery community organizations, drug user unions, hospitals and pharmacies, among others. While some providers have found it more difficult to connect participants to complementary resources and supports through virtual care, technology-assisted services can also be leveraged to link participants to care, especially in geographic areas that lack inperson resources and services. Providers who are seeing their participants in person can also be a bridge to telehealth and other technology-assisted services, helping participants overcome any initial stumbling blocks to care. Some very effective linkages are made when virtual services are partnered with in-person services, including medication dispensing.



Example from the Field: Homeless Healthcare Los Angeles Center for Harm Reduction

Providing MOUD for participants of a Los Angeles SSP became possible through a "coordinated pharmacy" model at Homeless Healthcare Los Angeles Center for Harm Reduction. Previously, Homeless Healthcare was able to directly dispense buprenorphine to its participants, but when the COVID-19 pandemic made inperson appointments impossible, medication dispensing had to take a different form. Partnering with pharmacies within a five-block radius of the clinic, the Center for Harm Reduction created processes to ensure their patients efficiently and successfully received their buprenorphine, including workarounds to address issues of patients who lack identification cards or insurance.



Example from the Field: University of Minnesota Community and University Health Care Center's Low-threshold Buprenorphine Prescribing

When the COVID-19 pandemic led to a rapid transition to telehealth, staff at the Community and University Health Care Center (CUHCC) recognized that many participants receiving buprenorphine treatment — especially those experiencing housing instability — were not able to attend video visits. They developed a very low-threshold process for enrolling and caring for participants by phone, and created a packet of the paperwork for participants to complete for clinic registration, including releases of information. If a person is in withdrawal or interested in buprenorphine treatment, outreach staff from community-based organizations ask the participant to complete the paperwork and then link them to the CUHCC prescribing clinician. The clinician then sends a secure message to the clinic scheduler to complete the registration. By the time the phone visit is complete, the participant is registered at the clinic and medications can be ordered at the pharmacy. If the participant has insurance, the clinic can bill for this visit. This process has been used by harm reduction outreach workers in the field and at homeless encampments, as well as by care coordinators at emergency homeless and COVID-19 quarantine hotels. It does not rely on participants having a mobile phone, as outreach workers or shelter staff can call from their mobile phones.

"The most important thing that helps my rapport is having a legit person who already has the rapport [with PWUD] getting me on the phone, having [a harm reduction outreach worker that is trusted in the community] say, 'Let's see if the clinician is available, [Dr. X] is someone who doesn't judge and is there to support you."

- CUHCC Buprenorphine Treatment Provider

٩

Key Considerations for Developing Effective Partnerships to Support Virtual Care

- Virtual services have great benefits but cannot provide some services that only in-person providers can. Having linkages between the two can maximize effectiveness and care coordination.
- Partner with trusted organizations or clinics that you know provide culturally relevant, non-stigmatizing care to PWUD.
- Provide warm handoffs, including introductions to virtual care providers, escorting participants to appointments and following up with participants to make sure they received the care or services they were seeking.
- Establish protocols for contacting partners outside of regular business hours, so linkage is most likely to happen when you are with the participant.
- Regarding medications, be aware of regulations related to pick-up and storage for participants.



Training and Education Resource for Providers

 Supporting Patients with OUD through Peer Outreach and Telehealth (1-hour recorded webinar; Center for Addiction Medicine and Policy and Penn Medicine)

Since the onset of the COVID-19 pandemic, there has been a significant increase in the number of virtual harm reduction, peer support, recovery support and mutual aid resources available to PWUD or people in recovery. Providers can help link participants to the wide range of virtual services now available.



Resources to Support Participants' Social Connections

- NEXT Distro Resource Library (A comprehensive catalog of services and supports available for PWUD, including technology-assisted services)
- Virtual Recovery Resources (A list of virtual recovery resources and tips for setting up virtual recovery meetings)
- Digital Recovery Meetings (Unity Recovery)

- Peer Support App Database (A list of mobile applications to facilitate peer support; Digital Peer Support)
- Mutual Aid Resources (Faces and Voices of Recovery)
- In the Rooms (Global online community that hosts virtual live meetings and discussion groups for people with substance use challenges)

In addition to virtual peer support, recovery and mutual aid services and groups, providers can connect participants to Never Use Alone and similar hotlines that provide virtual drug use supervision and contact emergency services during a crisis with prior permission from callers. During the COVID-19 pandemic, when stay-at-home and social distancing orders may still be in place and an increased number of people are using drugs alone, it is critical PWUD have additional services to prevent overdose and other substance use-related harms. Because Never Use Alone and similar services are relatively new, some harm reduction or SUD treatment participants may not be familiar with how they work or whether they are trusted; harm reduction and SUD treatment providers can offer such information. For more about the hotline, see Never Use Alone.





Example from the Field: Never Use Alone

Never Use Alone is an overdose response hotline for people who are using drugs alone. Volunteer hotline operators, all of whom have lived or family experience of substance use, stay on the line with callers while they engage in drug use and for approximately 10 to 15 minutes after to ensure the caller is okay. If the caller stops responding, the operator notifies emergency services. 139 Callers provide hotline operators their location and specify who they would like called if there is an emergency (e.g., emergency services, a friend or a family member who is nearby and has access to naloxone). Never Use Alone received one or two calls per week during the first few months after it was established in September 2019. When the COVID-19 pandemic began and stay-at-home orders were enacted, Never Use Alone filled a unique niche by keeping people using drugs safe while adhering to safety precautions and social distancing messages to avoid putting anyone in danger of COVID-19. Currently, Never Use Alone receives 10 to 30 calls per day and has 16 volunteer hotline operators. To date, over 4,000 calls have been received and emergency medical services have been required 25 times. All 25 times, the caller has been successfully revived. Volunteer hotline operators also connect callers to existing harm reduction services and supplies when requested. The Never Use Alone model has now been replicated in 10 states and Canada.

"Even when it comes to quantities of supplies or how we're going to communicate or what it's going to look like, we're often adapting to that person's requests and what their needs are and those are different person to person."

- Mike Brown, Founder, Never Use Alone



Example from the Field: Telehealth in Hawaii Local Libraries

With funding support from the CDC and the American Rescue Plan Act of 2021, the Hawaii State Department of Health launched an innovative partnership with the Hawaii State Public Library System, University of Hawaii at Manoa's Pacific Basin Telehealth Resource Center and 15 local libraries in rural and underserved parts of the state. Each library will be equipped with technology and will designate a private room for telehealth. Additionally, high school and college students will be trained as health and digital navigators available to assist people with using telehealth services as well as with using computers to find information about COVID-19 and other health concerns. In 2022, the initiative intends to add mobile clinic vans that will rotate between the 15 libraries, setting up in their parking lots to allow for in-person services.¹⁴⁰

STRATEGY 5. FINANCE AND SUSTAIN TELEHEALTH AND TECHNOLOGY-ASSISTED SERVICES

During the COVID-19 pandemic, telehealth and technologyassisted services for PWUD were financed primarily throug insurance reimbursement for billable services and through grant funding. While there has been an increase in funding opportunities to support telehealth and technology-assisted services during the pandemic, the long-term sustainability of these services is uncertain. Changes to private and public insurance policies have expanded reimbursement opportunities, and, in some cases, rates for telehealth services; however, these changes are temporary. Furthermore, a range of public and private grants issued in response to the pandemic have enabled adoption and implementation of telehealth and technology-assisted supports by organizations that serve PWUD, but many of these grants are time limited. Despite these challenges, there are current opportunities to support telehealth and technology-assisted services for PWUD. In addition to securing funding for services, organizations can support sustainability by conducting program evaluation and engaging in advocacy efforts.

Insurance Reimbursement

The COVID-19 pandemic led to an expansion of telehealth services eligible for reimbursement from private and public insurers. Numerous advocacy efforts at the state and federal levels are underway in support of making these changes permanent. To help providers navigate telehealth reimbursement, resources and tools are provided below. Additional resources and tools are in Appendix F. Resources and Tools.



Resources and Tools for Telehealth Reimbursement

- Billing for Telehealth Encounters: An Introductory Guide on Fee-for-Service (CCHP)
- Getting Paid: MAT Provided via Telehealth (Pacific Southwest Technology Resource Center)
- State Telehealth Laws and Reimbursement Policies At a Glance (CCHP)
- Supporting Access to Telehealth for Addiction Services: Regulatory Overview and General Practice Considerations (American Society of Addiction Medicine)

Grant Funding

In addition to insurance reimbursement, there has been an expansion in private and public grant programs to support telehealth and technology-assisted services. Examples of existing grant programs and resources for identifying grant opportunities are below. While the provided examples are national in scope, organizations should also explore grantmakers specific to the regions they serve as local philanthropy and funders have also increased grantmaking in response to the COVID-19 pandemic.

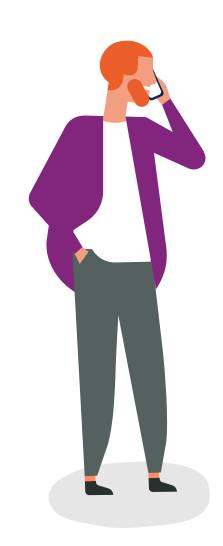


Resources for Grant Funding to Support Telehealth and Technology-assisted Services for PWUD

- Telehealth Use in Rural Healthcare Funding and Opportunities (Rural Health Information Hub)
- Foundation for Opioid Response Efforts
- Comer Family Foundation
- Open Society Foundations
- National Consortium of Telehealth Resource Centers
- Connected Care Pilot Program (Federal Communications Commission)

.....

Grant Announcements (SAMHSA)



Implement Program Evaluation

Program evaluation is a critical component of any public health intervention and a valuable tool not only to assess whether project activities meet intended goals, but also to inform quality improvement efforts and demonstrate the value of the program to potential funders and stakeholders. Figure 1, adapted from SAMHSA, illustrates different types of evaluation, when it should occur and the questions each evaluation type seeks to answer, which can be applied across the continuum of program planning and implementation. For more information on evaluating telehealth and technology-assisted programs within substance use-related settings, see SAMHSA's Telehealth for the Treatment of Serious Mental Illness and Substance Use Disorders.

Figure 1. Evaluation Framework for Telehealth and Technology-assisted Services¹⁴¹

Formative evaluation	Process and implementation evaluation	Continuous quality improvement	Outcome and effectiveness evaluation	Impact evaluation
During the development of program, prior to full-scale implementation.	As soon as the program implementation begins and during operation.	As soon as the program implementation begins and during operation.	After the program is initiated with at least one participant.	During operation of the program, and at appropriate intervals at the end of the program.
 Is the telehealth or technology-assisted program needed? By whom? Is it filling a gap? Is the telehealth or technology-assisted program appropriate for the population of interest? What resources does the organization have and need to evaluate the program? 	 Are telehealth and technology-assisted services being implemented as intended? What are the barriers and facilitators to implementation of the program? Are the services being used? What are the experiences of those implementing the program? Those receiving the program's services? 	 What improvements could be made to the telehealth and technology-assisted program? Where are the slowdowns or points of disconnect? Are there points of care where patient engagement drops off? What parts of implementation were working and should be unchanged? What organizational factors contributed to implementation successes and/or challenges? 	 Were the objectives of the program achieved? Did participant health, wellbeing, attitudes, beliefs and behaviors change from the start of their participation in the program? 	To what extent can participant outcomes be attributed to telehealth and technology-assisted program activities?

Identify the Appropriate Mix of Service Modalities

One key aspect of transitioning telehealth and technology-assisted services into a post-pandemic service landscape is determining what the appropriate mix of service delivery is for the population of focus. For some participants, access may be improved by continuing to utilize telehealth and technology-assisted services, while for other participants, in-person services may be preferred or better suited to meet their needs. Given limited resources, organizations will need to determine what portion of resources, staffing, infrastructure and capacity will continue to be devoted to telehealth and technology-assisted services and what proportion will be devoted to in-person services, among other things. Ideally, in-person services can be leveraged. For example, a provider in a clinic can see participants in-person and also via telehealth. Program evaluation efforts can help organizations determine the appropriate mix of service modalities. For example, a short participant survey or needs assessment to determine participant service modality preferences is useful to inform decision-making and program planning.

Resources for Program Evaluation

- Telehealth for the Treatment of Serious Mental Illness and Substance Use Disorders (SAMHSA)
- Post-Visit Patient Survey for Primary Care Video Visits (sample participant survey; Los Angeles County Department of Health Services)
- A Framework for Program Evaluation (CDC)
- Telehealth Implementation Playbook (American Medical Association)

Key Considerations for Sustainability

In general, funding for harm reduction and community-based SUD treatment and services is limited. Funding specifically for telehealth and technology-assisted services for PWUD is even more limited, but the COVID-19 pandemic has led to increased (at least temporarily) financial resources to support these services. Program sustainability is dependent on more than financial resources alone, however. For example, in addition to financial resources, organizations that provide care for PWUD need buy-in and support from participants and staff alike. Tips for sustainability, adapted from the CDC, are below.

-,0,-

Tips for Sustainability¹⁴²

- Foster relationships with a wide range of diverse stakeholders.
- Diversify funding sources.
- Consider partnering with health and social service agencies, local and regional foundations, community-based organizations, overdose prevention coalitions and other local and state entities to support financial and social sustainability.

- Identify and partner with project champions and allies from different sectors in the community.
- Include program participants at every level of planning and implementation.
- Develop and implement a program evaluation plan to track progress and inform quality improvement efforts that includes feedback from staff, participants and partners.
- Implement policies and practices to support staff wellness and prevent burnout.
- Advocate for systems-level policy change that will support increased access to services and supports.
- Educate community members, policymakers, partners and other stakeholders on the program's value and challenge misperceptions and myths rooted in stigma and discrimination.

The Role of Policy Advocacy

The expansion of telehealth and technologyassisted supports to provide care for PWUD during the COVID-19 pandemic has been largely dependent on temporary regulatory changes made by state and federal governments and insurance reimbursement policy changes. Policy and regulatory barriers to delivering MOUD via telehealth prior to the pandemic are welldocumented,143,144 and the inability to provide these services via telehealth has exacerbated gross disparities related to SUD treatment access by race and ethnicity, socioeconomic status, and geographic location.145, 146, 147 To support long-term sustainability of telehealth and technology-assisted supports for harm reduction and SUD treatment participants, numerous provider and advocacy organizations have engaged in policy advocacy efforts to make permanent COVID-related policy changes and to expand telehealth access. In addition to policies that directly impact the provision of care for PWUD, there are opportunities to address disparities that exist in access to technology and broadband more generally across the U.S. through collective action to address inequity.

Examples of Policy Advocacy Efforts to Expand Telehealth for Substance Use Disorder Treatment^{148, 149}

- Permanently eliminating the requirement for an initial in-person exam for buprenorphine treatment.
- Reducing or removing limitations on take-home methadone dosing.
- Allowing opioid treatment programs to introduce or continue mobile/ delivery treatment. In June 2021, the DEA issued a final rule revising existing regulations related to mobile delivery of methadone treatment.
- Permanently allowing for audio-only telehealth visits for buprenorphine treatment.

As of August 2021, several bills have been introduced in Congress that, if enacted, would support increased access to telehealth and technology-assisted services. Some examples include:

- Telehealth Response for E-prescribing Addiction Therapy Services Act (TREATS) Act. (S. 340), which allows for the initiation of medication-assisted treatment without a prior in-person visit, and for Medicare to be billed for audio-only telehealth services.
- Temporary Reciprocity to Ensure Access to Treatment (TREAT) Act (H.R. 708/S. 168), which allows for temporary licensing reciprocity during the COVID Public Health Emergency and the provision of services across states lines via telehealth.
- CONNECT for Health Act (S. 1512), which removes the geographic site restriction for telehealth services, expanding originating sites to include the home, and which provides the Secretary the authority to waive telehealth restrictions currently in place.
- Coronavirus Mental Health and Addiction Assistance Act (H.R. 593), which authorizes \$100 million to expand and create COVID-19 response programs to assist individuals managing mental health and substance use challenges. Eligible programs include those providing services via telehealth.
- Permanency for Audio-Only Telehealth (H.R. 3447), which expands access to audio-only telehealth under Medicare for evaluation and management, mental health and SUD services when the modality is the preference of the patient.
- Telemental Health Care Access Act of 2021 (H.R. 4058), which removes the statutory requirement that Medicare beneficiaries be seen in person within six months of treatment for mental health services through telehealth, consistent with how SUD telehealth services are covered under Medicare through the SUPPORT Act.

"For this type of work, substance use disorder treatment with buprenorphine, there's no reason why we shouldn't just keep allowing [services via telehealth] for people who want it. I think we need to make sure that having telehealth as an option doesn't detract from building quality in-person access. Because lots of people prefer it or they can't do telehealth for whatever reason. I think there's no reason that we should be going back [to exclusively in-person visits]. At this point it's become pretty established and there's no reason why you need to see someone in person to provide this care. I hope it continues to be an option and expands. And we also continue to strengthen in-person care."

- Buprenorphine Treatment Provider





Example from the Field: Maine Access Points

Maine Access Points (MAP) provides harm reduction services throughout Maine, including peer-based distribution, mail orders and home deliveries, in combination with phone and video communication and online trainings. 150 For people who reside in three rural counties, staff offer home deliveries of naloxone and harm reduction supplies. For people outside of those counties, supplies are shipped via mail. Prior to the pandemic, this model was not possible due to state regulatory restrictions. However, during the pandemic, an executive order was issued by the Office of the Governor that allowed MAP to provide needsbased mobile and flexible services to decrease COVID-19 transmission risk.¹⁵¹ Using a secure, encrypted online platform has allowed MAP to increase the volume of orders filled while maintaining trust and privacy with participants. For participants who are unable to or uncomfortable with using the online platform, orders can be placed over the phone. MAP staff are able to have personal one-on-one conversations with each participant about privacy and security and staff help to identify a modality — mail, home delivery or in-person services — that works for each person. MAP is currently advocating for permanent regulatory changes that will allow needs-based exchange to continue in the future.



Resources to Support Policy Advocacy

- Advocacy Handbook (National Council for Mental Wellbeing)
- Broadband Access and Public Health: Legal and Policy Opportunities for Achieving Equitable Access (90-minute recorded webinar; Network for Public Health Law)
- Supporting Access to Telehealth for Addiction Services: Regulatory Overview and General Practice Considerations (American Society of Addiction Medicine)
- Expanding Telemedicine to Enhance Equity for Persons with Opioid Use Disorder: Position Statement (Association for Multidisciplinary Education, Research in Substance Use and Addiction)

Conclusion

The rapid transition to telehealth and technology-assisted services catalyzed by the COVID-19 pandemic provides an opportunity for harm reduction and SUD treatment providers to reimagine the way care for PWUD is delivered by maximizing access to care while minimizing risks. Although telehealth and technology-assisted services are tremendously valuable for increasing access to care, implementing and sustaining these services can be challenging. Moreover, gross disparities continue to persist in the U.S. related to accessing both technology and evidence-based treatment and services for PWUD related to geography, race, ethnicity and disability status, among other factors. When implementing telehealth and technology-assisted services, providers must apply an equity lens and make efforts to ensure services are accessible and available to all people. Additionally, while many services can be delivered virtually, some services and supports for PWUD are more effectively delivered in-person. Virtual services are not a replacement of in-person services, and services should be offered to participants in multiple modalities (virtual and in-person) whenever possible. In addition to the strategies outlined in this resource guide, many more resources and tools to assist providers in planning and implementation efforts can be found in Appendix F. Resources and Tools.

Appendix A. Telehealth Glossary

Term	Meaning	
Asynchronous	A type of digital communication where messages, images or data are collected at one point in time and interpreted or responded to later. Patient portals can facilitate this type of communication between providers and participants through secure messaging. ¹⁵²	
Distant site	The location where the distant provider is housed and offering health information or virtual services by remote means to the originating site. ¹⁵³	
Encryption	The translation of data into a form that is unintelligible without a deciphering mechanism. ¹⁵⁴	
End-to-end encryption	Communications encryption in which data is encrypted when being passed through a network, but routing information remains visible. ¹⁵⁵	
Live video	Live, two-way interaction between a participant and a provider using audiovisual telecommunications technology. This type of service is also referred to as "real-time" and may serve as a substitute for an inperson encounter when it is not available. ¹⁵⁶	
Mobile health	Health care and public health practice and education supported by mobile communication devices such as cell phones and tablet computers. ¹⁵⁷	
Originating site	The location of the participant when telehealth is used, whether at home, in an office or at another location. ¹⁵⁸	
Patient portal	A secure internet sign-on that allows patients to contact their provider, review medical tests and records, access health education materials and seek appointments. ¹⁵⁹	
Real time	Often refers to a live videoconference or link to a participant, where the provider and participant can s each other and can interact nearly as they would in a face-to-face encounter. ¹⁶⁰	
Remote patient monitoring Personal health and medical data collection from an individual in one location, which is transmelectronic communication technologies to a provider in a different location for use in care and support. 161 Also known as telemonitoring.		
Store-and- forward Electronic transmission of medical information, such as digital images, documents and pre-re- videos, to a provider who uses the information to evaluate the case or render a service outside real-time or live interaction. 162		
Synchronous	Real-time telephone or live audio-video interaction typically with a patient using a smartphone, tablet or computer. ¹⁶³	
Telehealth	A broad term that encompasses a variety of telecommunications technologies and tactics to provide health services from a distance. Telehealth is not a specific clinical service, but rather a collection of means to enhance care and education delivery. ¹⁶⁴	
Telemedicine	The practice of medicine using technology to deliver care at a distance. A physician in one location uses a telecommunications infrastructure to deliver care to a patient at a distant site. ¹⁶⁵	
Telemonitoring	A more passive form of telehealth than a live video appointment. It often involves providing a participant at home with tools to record and transmit important health information, such as blood pressure, blood sugar levels or weight, to a provider. ¹⁶⁶	
Telepsychiatry	The process of providing health care from a distance through technology, often using videoconferencing. Telepsychiatry, a subset of telemedicine, can involve providing a range of services including psychiatric evaluations, therapy (individual therapy, group therapy, family therapy), patient education and medication management. ¹⁶⁷	

Appendix B. Provider Tips for Effective Virtual Interactions 168

- Set expectations.
 - Explain how long the anticipated length of interaction will be and the content that will be discussed.
- Reinforce connection with trusted and referring groups.
 - » If the participant was referred by another organization, identify where the referral came from and how information is shared between the organizations.
- Break the ice.
 - » Acknowledge challenges of telephonic or video interactions at the outset.
- Foster empowerment.
 - » Ask for the participant's permission to get started.
 - » Invite and answer the participant's questions throughout.
- Ask how participants prefer to receive information.
 - » Ask if they prefer handouts and paperwork via mail or email.
 - » If the participant is unable to receive paperwork via mail or email, identify another method to communicate the information to them.
 - » Ask if they want information delivered verbally either over the phone or by video.
- Leave space for relationship building.
 - » Rather than rushing through the virtual appointment, take time to focus on building a relationship with the participant.
 - Use informal touchpoints, such as check-ins, to validate emotions, check on progress with a goal and mitigate social isolation.
- Read people's "sound" language.
 - » Listen for tone, hesitation and distraction as valuable cues.
 - » Be comfortable with silence and resist jumping in to fill the void.
 - » Take note of what you are not hearing the participant say.
- Connect participants with resources and programming to address social needs.
 - » Offer resource navigation, troubleshoot ambivalence and connect participants to social and peer support programs.
 - » Assess the participant's needs, paying particular attention to social needs, anxieties, isolation and loneliness.

Appendix C. Strategies for Building Relationships Over the Phone¹⁶⁹

- Practice good phone etiquette.
 - Use the participant's name in a respectful manner.
 - » Know what your introduction sentence will be.
 - » Plan ahead for unusual circumstances and know how you will handle it.
 - » Have all background paperwork and any necessary forms or questionnaires in front of you or easily available on the computer.
 - » Plan for an interpreter if needed.
- Use open-ended questions.
 - » Avoid closed-ended questions.
 - » Plan questions in advance.
- Summarize what you have heard.
 - » Ensure what you are hearing is what the participant intended.
 - » Keep it brief.
- Ensure every call has a purpose.
 - » Clearly explain the purpose of the call with the participant.
 - » Recap what was accomplished at the end of the call with the participant.
- Express empathy.
 - » Show that you understand and acknowledge participants' feelings.
 - » Validate participants' feelings.
 - » Practice active, empathic and reflective listening.
- Validate stressful experiences.
 - » Use empathy statements, such as "This must be difficult for you..." or "I understand this can be frustrating..."
 - » Ask for permission from the participant to provide help.
- Keep the call moving in the right direction.
 - » Redirect the call when appropriate.
 - » Share information slowly.
 - » Apologize if you have to interrupt and redirect the conversation.
 - Describe what the focus of the next call will be.

Appendix D. Examples of Telehealth and Technology-assisted Services for PWUD

Description of technology-assisted service or support for PWUD

Virtual peer support services. 170, 171

"Never use alone" hotlines and mobile applications.172

Establishment of harm reduction supply vending machines. 173, 174

Donated mobile phones and tablets to facilitate low-barrier telemedicine connections with participants receiving community-based services. 175

Creation of a student-run TeleMOUD clinic.176

Established 24-hour text line to assist participants in need of supplies or services.¹⁷⁷

Implemented "telephone booth" model to provide participants access to telehealth on-site at syringe exchange. 178

Piloted three-part mobile health intervention, including a wearable device to detect substance craving and stress biomarkers, a mobile app offering dialectical behavior therapy (DBT) interventions and a clinician-facing portal to support the treatment team.¹⁷⁹

Developed one-on-one phone-in service to provide participants SMART Recovery remotely, including social support, cognitive behavioral techniques and referrals to resources.¹⁸⁰

Established 24-hour hotline to serve as a "tele-bridge" clinic and connect individuals with moderate to severe OUD with a provider to conduct an assessment and prescribe buprenorphine as needed.¹⁸¹

Transitioned from on-site buprenorphine dispensing to "coordinated pharmacy" model to provide buprenorphine at local pharmacies for participants referred by the program who lacked identification or insurance.¹⁸²

Transitioned from distributing supplies freely to prepacking all supplies for participants and distributing supplies via mail, mobile and contactless delivery. 183, 184, 185

Established partnership between low-barrier addiction medicine bridge clinic and harm reduction organization conducting street outreach to facilitate tele-buprenorphine inductions.¹⁸⁶

Development of a pharmacy mapping project that identified potential barriers to buprenorphine and naloxone dispensing at local retail pharmacies.¹⁸⁷

Appendix E. Key Informants

Informant	Organization	State
Shoshana Aronowitz	Ophelia; University of Pennsylvania	Nationwide; Pennsylvania
Mike Brown	Never Use Alone	Nationwide
Patrick Brown	Oregon Health and Science University School of Medicine	Oregon
Braunz Courtney	HIV Education and Prevention Project of Alameda County (Casa Segura) (HEPPAC)	California
Jamie Favaro	NEXT Distro	Nationwide
Sharon Joslin	Yale School of Medicine Community Health Care Van	Connecticut
Ryan Kelly	University of Minnesota Community- University Health Care Center	Minnesota
Rachel Lockard	Oregon Health and Science University School of Medicine	Oregon
Anna McConnell	Maine Access Points	Maine
Rolando Tringale	Center for Harm Reduction, Homeless Healthcare Los Angeles	California

Appendix F. Resources and Tools

Title	Source	Date	Description	
Overview Resources				
COVID-19 Pandemic Impact on Harm Reduction Services: An Environmental Scan	National Council for Mental Wellbeing	2021	Describes the impact of the pandemic on PWUD and harm reduction organizations, including the use of technology-assisted services and telehealth.	
Telehealth for the Treatment of Serious Mental Illness and Substance Use Disorders	Substance Abuse and Mental Health Services Administration (SAMHSA)	2021	An evidence-based resource guide that provides research findings on telehealth for SUD treatment, guidance for implementing evidence-based practices, examples from the field and resources.	
Supporting Access to Telehealth for Addiction Services: Regulatory Overview and General Practice Considerations	American Society of Addiction Medicine (ASAM) COVID-19 Task Force	2020	Provides guidance and recommendations for SUD treatment providers on using telehealth and telehealth policies.	
COVID-19 Telehealth Coverage Policies	Center for Connected Health Policy (CCHP)	2021	Provides up-to-date information on federal policies related to telehealth.	
COVID-19 Related State Actions	ССНР	2021	Provides up-to-date information on state policies related to telehealth.	
Using Telehealth to Expand Access to Essential Health Services during the COVID-19 Pandemic	Centers for Disease Control and Prevention (CDC)	2020	Describes the landscape of telehealth services and provider considerations for using telehealth to provide care during the COVID-19 pandemic.	
Medicaid and CHIP COVID-19 Resources – Telehealth at Your Fingertips	Upper Midwest Telehealth Resource Center	2021	Provides a list of resources related to Medicaid and CHIP reimbursement for telehealth during the pandemic.	
Telehealth for Opioid Use Disorder Toolkit: Guidance to Support High-Quality Care	Providers Clinical Support System	2021	Offers guidance and information on providing telehealth to treat opioid use disorder.	
Telehealth Use in Rural Healthcare Toolkit	Rural Health Information Hub	2021	A comprehensive toolkit that provides information, resources, case examples, funding opportunities and more to support telehealth use in rural areas.	

Strategy 1: Improve participant access to technology.				
Bridging the Digital Divide	Health Information Technology, Evaluation, and Quality Center (HITEQ)	2021	Provides recommendations and tips for overcoming challenges related to participant access and comfort with technology.	
Emergency Broadband Benefit	Federal Communications Commission (FCC)	2021	Provides information about eligibility and how to apply to the Emergency Broadband Benefit program.	
Lifeline Program for Low- Income Consumers	FCC	2021	Provides information about eligibility and how to apply to the to the Lifeline Program.	
Lifeline Support for Affordable Communications	FCC	2021	Provides information for consumers about the Lifeline program, including frequently asked questions and a video with information provided in American Sign Language.	
Strategy 2: Increase participa	nt knowledge of and co	mfort v	vith telehealth and technology-assisted services.	
Tele-social care: Implications and strategies	Center for Health and Social Care Integration and The National Center for Complex and Social Needs	2021	Offers tips for delivering telephonic-only services and provides resources related to implementation and sustainability.	
Best practices and strategies for tele-social care	Center for Health and Social Care Integration and The National Center for Complex and Social Needs	2021	One-hour recorded webinar that discusses best practices and tips for delivering social care virtually.	
Accessible products and services	Verizon	2021	Provides a comparison of accessible features among commonly available Apple, Samsung and other brands of phones.	
How to Start Buprenorphine/ naloxone at Home (Suboxone Induction)	Matt Perez, MD	2020	Guide for participants on how to start buprenorphine induction at home, including a flowchart.	
OTP Clinician Perspectives on Methadone Service Delivery and the Use of Telemedicine During the COVID-19 Pandemic	Foundation for Opioid Response Efforts	2020	75-minute recorded webinar featuring experts from the field discussing lessons learned and recommendations related to using telehealth to deliver methadone treatment for opioid use disorder to participants.	

Tips to Keep Your Telehealth Visit Private	Center of Excellence for Protected Health Information	2021	One-page tip sheet for participants on how to keep their virtual visits private, including how to protect their communication and prepare their surroundings.	
How to Prepare for a Video Appointment with Your Mental Health Clinician	American Psychiatric Association	2020	One-page tip sheet for participants on how to prepare for a mental health-related virtual appointment.	
How to Prep for Your Telehealth Appointment	Heartland Telehealth Resource Center	2021	90-second animated video that provides participants tips for preparing for their telehealth visit.	
Preparing Patients for Telebehavioral Health	U.S. Department of Health and Human Services (HHS)	2021	Provides guidance for participants using telehealth.	
How Do I Use Telehealth? Frequently Asked Questions and Insights for Patients	California Telehealth Resource Center	n.d.	Offers easy-to-understand information about the different types of telehealth and quick tips on how to use telehealth.	
Translation Tool Kit	Pacific Basin Telehealth Resource Center	2019	Provides instructions on how to use Zoom for smartphone, Zoom for computer, and Doxy.me in Chuukese, English, Ilocano, Korean, Marshallese, Samoan, simplified Chinese, Spanish, Tagalog and traditional Chinese.	
Ten Tips for Caring for Immigrant and Limited English Proficiency Patients in the Age of Covid-19	University of California, San Francisco	2021	Offers tips and resources for providing virtual and inperson care to people who are immigrants and people who speak languages other than English.	
Telehealth Strategies and Resources for Patients with Limited English Proficiency	HITEQ	2020	Describes strategies and resources for providing telehealth services to people who speak languages other than English.	
Telemedicine for Health Equity Toolkit	Center for Care Innovations	2021	Provides information, tools, resources, scripts and workflows related to best practices to address disparities when using telehealth.	
Strategy 3: Increase staff knowledge and comfort using telehealth and technology-assisted services.				
Frequently Asked Questions (and Answers!): Treating Opioid Use Disorder via Telehealth Tips for Primary Care Providers	Opioid Response Network and Providers Clinical Support System	2020	Offers tips for providers using telehealth to deliver MOUD, including regulatory information and minimizing risks associated with telehealth.	
Telemedicine-Delivered Buprenorphine Treatment in the Age of COVID-19	Providers Clinical Support System	2020	60-minute recorded webinar that discusses federal regulations and guidance, the evidence base for tele-MOUD, clinical considerations and requirements.	

COVID-19 Public Health Emergency Response and 42 CFR Part 2 Guidance	SAMHSA	2020	Provides information on complying with 42 CFR P art 2 privacy and confidentiality regulations during the COVID-19 pandemic.
FAQs on Telehealth and HIPAA during the COVID-19 nationwide public health emergency	HHS Office of Civil Rights	2020	Provides guidance about complying with HIPAA while delivering telehealth during the COVID-19 pandemic.
Bulletin: HIPAA Privacy and Novel Coronavirus	HHS Office of Civil Rights	2020	Provides guidance about complying with HIPAA during the COVID-19 pandemic.
Best Practices for Telehealth During COVID-19 Public Health Emergency	National Council for Mental Wellbeing	2020	Describes regulatory changes, key considerations, best practices and resources for telehealth use during the pandemic.
Telerecovery Guide and SOP	Unity Recovery	2020	Provides step-by-step guidance for implementing digital recovery support services.
Mobile Addiction Services Toolkit	Kraft Center for Community Health and Massachusetts General Hospital	2020	Comprehensive toolkit that offers information, recommendations, examples and sample policies related to providing mobile harm reduction and MOUD services.
Training and Technical Assistance Related to COVID-19	SAMHSA	2021	Catalog of training and technical assistance resources for mental health and substance use providers to overcome challenges during the COVID-19 pandemic.
Tele-social Care: Implications and Strategies	Center for Health and Social Care Integration	2021	Offers resources and recommendations for frontline providers related to preparing for successful virtual interactions, effectively engaging with participants virtually, and helpful follow-up practices.
Telehealth Implementation Playbook	American Medical Association	2020	Provides guidance related to implementing telehealth, including designing workflows, preparing care teams, evaluation and more.
How to Leverage Telehealth Strategies for Substance Use Brief Intervention	National Council for Mental Wellbeing	2021	One-hour recorded webinar that discusses evidence-based approaches and recommendations for providing virtual screening and brief intervention for substance use challenges using telehealth.
Treatment of Substance Use Disorders in Association with COVID-19	CA Bridge	2020	Provides information and resources for providers on a variety of topics, including starting buprenorphine via telehealth, accessing virtual resources for PWUD and billing for telehealth services.

Strategy 4: Develop partnerships to strengthen care coordination and team-based care.				
Your Recovery is Important: Virtual Recovery Resources	SAMHSA	2020	Provides a list of virtual recovery resources and tips for hosting virtual recovery meetings.	
The Synergy Between Care Coordination and Telehealth	Great Plains Telehealth Resource and Assistance Center	2021	One-hour recorded webinar that describes how to leverage telehealth as part of care coordination.	
NEXT Distro Resource Library	NEXT Distro	2021	A comprehensive library of virtual and in-person supports and services for PWUD.	
Digital Recovery Meetings	Unity Recovery	2021	Offers regular, free virtual recovery meetings.	
Peer Support App Database	Digital Peer Support	2021	Offers a list of mobile applications that can be used to facilitate peer support services and digital communication, including mobile applications with accessible features.	
Supporting Patients with OUD through Peer Outreach & Telehealth	Center for Addiction Medicine and Policy and Penn Medicine	2021	One-hour recorded webinar featuring peer support workers and SUD treatment providers that discusses best and promising practices and innovations in delivering virtual peer support and outreach services.	
Strategy 5: Finance and susta	in telehealth and techn	ology-a	assisted services.	
Center for Connected Health Policy	ССНР	2021	Provides up-to-date information on the latest regulatory and reimbursement policies related to telehealth.	
Grant Funding for Telehealth Programs	Rural Health Information Hub	2021	Provides a list of resources related to obtaining grant funding to support telehealth programs.	
A Toolkit for Building and Growing a Sustainable Telehealth Program in Your Program	American Academy of Family Physicians and Manatt Health	2020	Provides guidance on financing and sustaining telehealth programs, including information about insurance reimbursement for specific types of services.	

15 Key Steps for Creating a Business Proposal to Implement Telemedicine	National Consortium of Telehealth Resource Centers	2021	Describes 15 steps to implement a successful telemedicine program.
Increased Access to Medications for Opioid Use Disorder during the COVID-19 Epidemic and Beyond	The Network for Public Health Law	2020	90-minute recorded webinar that describes the laws and regulations that impact MOUD, the changes made during the pandemic and advocacy efforts to improve access to MOUD beyond the pandemic.
COVID-19 policy recommendations for OUD, pain, harm reduction	American Medical Association	2021	Identifies the American Medical Association's policy priorities related to harm reduction and treating opioid use disorder during the pandemic, including telehealth-related priorities.
Getting Paid: MAT Provided via Telehealth	Pacific Southwest Addiction Technology Transfer Center	2021	Webinar slides that provide information about receiving reimbursement for providing virtual MOUD services.
Telehealth for Providers: What You Need to Know	Centers for Medicare and Medicaid Services	2021	Provides information about billing for telehealth, including documentation and coding tips. Also provides tips for starting and sustaining telehealth.
State Telehealth Laws and Reimbursement Policies – At a Glance	ССНР	2021	Two-page infographic describing state telehealth laws and policies as of Spring 2021.
Advocacy Handbook	National Council for Mental Wellbeing	2021	Provides action steps, resources and tools for engaging in effective policy advocacy activities.
Telehealth guidance by state during COVID-19	American Psychological Association	2021	Provides links to state actions related to telehealth in all 50 states and the District of Columbia.
Broadband Access and Public Health: Legal and Policy Opportunities for Achieving Equitable Access	Network for Public Health Law	2020	90-minute recorded webinar featuring legal and policy experts from the field discussing opportunities to improve equitable access to broadband.

Appendix G. References

- ¹Taylor, S., Paluszek, M. M., Rachor, G. S., McKay, D., & Asmundson, G. J. G. (2021). Substance use and abuse, COVID-19-related distress, and disregard for social distancing: A network analysis. Addictive Behaviors, 114, 106754. https://doi.org/10.1016/j. addbeh.2020.106754
- ² Addiction Policy Forum. (2020, May). COVID-19 Pandemic Impact on Patients, Families and Individuals in Recovery from Substance Use Disorder. https://www.addictionpolicy.org/post/covid-19-pandemic-impact-on-patients-families-individuals-in-recovery-fromsubstance-use-disorder
- ³ Pollard, M. S., Tucker, J. S., & Green Jr., H. D. (2020, September 29). Changes in adult alcohol use and consequences during the COVID-19 pandemic in the US. JAMA Network Open, 3(9), e2022942.
- ⁴ Hochstatter, K. R., Akhtar, W. Z., Dietz, S., Pe-Romashko, K., Gustafson, D. H., Shah, D. V., Krechel, S., Liebert, C., Miller, R., El-Bassel, N., & Westergaard, R. P. (2020). Potential influences of the COVID-19 pandemic on drug use and HIV care among people living with HIV and substance use disorders: Experience from a pilot mHealth intervention. AIDS and Behavior, 25, 354-359. https://doi.org/10.1007/s10461-020-02976-1
- ⁵ Weerakoon, S. M., Jetelina, K. K., & Knell, G. (2020, December). Longer time spent at home during COVID-19 pandemic is associated with binge drinking among US adults. The American Journal of Drug and Alcohol Abuse. doi: 10.1080/00952990.2020.1832508
- ⁶ Centers for Disease Control and Prevention (CDC). (2020, March 19). Understanding the Epidemic. https://www.cdc.gov/drugoverdose/epidemic/index.html
- ⁷ Ahmad, F. B., Rossen, L. M., & Sutton, P. (2021, February 17). Provisional drug overdose death counts. National Center for Health Statistics. https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm
- ⁸ Mistler, C. B., Sullivan, M. C., Copenhaver, M. M., Meyer, J. P., Roth, A. M., Shenoi, S. V., Edelman, E. J., Wickersham, J. A., & Shrestha, R. (2021). Differential impacts of COVID-19 across racial-ethnic identities in persons with opioid use disorder. Journal of Substance Abuse Treatment, 129, 108387.
- ⁹ Mace, S., Siegler, A., & Wu, K. (2021, March). National Council for Mental Wellbeing. COVID-19 Pandemic Impact on Harm Reduction Services: An Environmental Scan. https://www.thenationalcouncil.org/wp-content/uploads/2021/03/Harm-Reduction-Environ-Scan.pdf?daf=375ateTbd56
- ¹⁰ Mace, S., Cadovius, N., Abbondandolo, G., & Brown, C. (2021, February). Telebehavioral Health Workforce Opportunities During the COVID-19 Pandemic. University of Michigan Behavioral Health Workforce Research Center. https://www.healthworkforceta.org/research-alerts/telebehavioral-health-workforce-opportunities-during-the-covid-19-pandemic/
- "Mace, S., Cadovius, N., Abbondandolo, G., & Brown, C. (2021, February). Telebehavioral Health Workforce Opportunities During the COVID-19 Pandemic. University of Michigan Behavioral Health Workforce Research Center. https://www.healthworkforceta.org/research-alerts/telebehavioral-health-workforce-opportunities-during-the-covid-19-pandemic/
- ¹² Mace, S., Cadovius, N., Abbondandolo, G., & Brown, C. (2021, February). Telebehavioral Health Workforce Opportunities During the COVID-19 Pandemic. University of Michigan Behavioral Health Workforce Research Center. https://www.healthworkforceta.org/research-alerts/telebehavioral-health-workforce-opportunities-during-the-covid-19-pandemic/
- ¹³ Wenger, L. D., Kral, A. H., Bluthenthal, R. N., Morris, T., Ongais, L., & Lambdin, B. H. (2021). Ingenuity and resiliency of syringe service programs on the front lines of the opioid overdose and COVID-19 crises. Translational Research. https://doi.org/10.1016/j.trsl.2021.03.011

- ¹⁴ Mace, S., Siegler, A., & Wu, K. (2021, March). National Council for Mental Wellbeing. COVID-19 Pandemic Impact on Harm Reduction Services: An Environmental Scan. https://www.thenationalcouncil.org/wp-content/uploads/2021/03/Harm-Reduction-Environ-Scan.pdf?daf=375ateTbd56
- ¹⁵ Substance Abuse and Mental Health Services Administration (SAMHSA). (2020, April 21). FAQs: Provision of methadone and buprenorphine for the treatment of Opioid Use Disorder in the COVID-19 emergency. https://www.samhsa.gov/sites/default/files/faqs-for-oud-prescribing-and-dispensing.pdf
- ¹⁶ Drug Enforcement Administration. (2020, March 31). Guidance document DEA068. https://www.deadiversion.usdoj.gov/GDP/(DEA-DC-022)(DEA068)%20DEA%20SAMHSA%20buprenorphine%20telemedicine%20%20(Final)%20+Esign.pdf
- ¹⁷ Center for Connected Health Policy. (2021). Coronavirus. https://www.cchpca.org/covid-19-legislation/
- ¹⁸ American Medical Association. (2020, April 27). CARES Act: AMA COVID-19 pandemic telehealth fact sheet. https://www.ama-assn.org/delivering-care/public-health/cares-act-ama-covid-19-pandemic-telehealth-fact-sheet
- ¹⁹ Center for Connected Health Policy. (2020, September 15). Telehealth Coverage Policies in the Time of COVID-19. https://www.cchpca.org/resources/covid-19-telehealth-coverage-policies
- ²⁰ Huskamp, H. A., Busch, A. B., Souza, J., Uscher-Pines, L., Rose, S., Wilcock, A., Landon, B. E., & Mehrotra, A. (2018, December). How is telemedicine being used in opioid and other substance use disorder treatment? Health Affairs, 37(12), 1940-1947.
- ²¹ Uscher-Pines, L., Cantor, J., Huskamp, H. A., Mehrotra, A., Busch, A., & Barnett, M. (2020). Adoption of telemedicine services by substance abuse treatment facilities in the U.S. Journal of Substance Abuse Treatment, 117, 108060.
- ²² Uscher-Pines, L., Cantor, J., Huskamp, H. A., Mehrotra, A., Busch, A., & Barnett, M. (2020). Adoption of telemedicine services by substance abuse treatment facilities in the U.S. Journal of Substance Abuse Treatment, 117, 108060.
- ²³ Brave Technology Cooperative. (2019, March). Snapshot.
- ²⁴ NEXT Distro. (2021). Our History. https://nextdistro.org/history
- ²⁵ Never Use Alone. (2021). About. https://neverusealone.com/
- ²⁶ Iser, J. (2019, May 13). Innovating to Reduce Harm in Las Vegas. https://www.bigcitieshealth.org/front-lines-blog/2019/5/13/innovating-to-reduce-harm-in-las-vegas
- ²⁷ Mace, S., Siegler, A., & Wu, K. (2021, March). National Council for Mental Wellbeing. COVID-19 Pandemic Impact on Harm Reduction Services: An Environmental Scan. https://www.thenationalcouncil.org/wp-content/uploads/2021/03/Harm-Reduction-Environ-Scan.pdf?daf=375ateTbd56
- ²⁸ Schlosser, A. & Harris, S. (2020, September). Care during COVID-19: Drug use, harm reduction, and intimacy during a global pandemic. International Journal of Drug Policy, 83, 102896. https://doi.org/10.1016/j.drugpo.2020.102896
- ²⁹ Mace, S., Siegler, A., & Wu, K. (2021, March). National Council for Mental Wellbeing. COVID-19 Pandemic Impact on Harm Reduction Services: An Environmental Scan. https://www.thenationalcouncil.org/wp-content/uploads/2021/03/Harm-Reduction-Environ-Scan.pdf?daf=375ateTbd56
- ³⁰ Glick, S. N., Prohaska, S. M., LaKosky, P. A., Juarez, A. M., Corcorran, M. A., & Des Jarlais, D. C. (2020, April 24). The Impact of COVID-19 on Syringe Services Programs in the United States. AIDS and Behavior, 1-3. Advance online publication. https://doi.org/10.1007/s10461-020-02886-2

- ³¹ Mace, S., Siegler, A., & Wu, K. (2021, March). National Council for Mental Wellbeing. COVID-19 Pandemic Impact on Harm Reduction Services: An Environmental Scan. https://www.thenationalcouncil.org/wp-content/uploads/2021/03/Harm-Reduction-Environ-Scan.pdf?daf=375ateTbd56
- ³² Schlosser, A. & Harris, S. (2020, September). Care during COVID-19: Drug use, harm reduction, and intimacy during a global pandemic. International Journal of Drug Policy, 83, 102896. https://doi.org/10.1016/j.drugpo.2020.102896
- 33 Never Use Alone. (n.d.). Never Use Alone. https://neverusealone.com/
- ³⁴ The Brave Technology Coop. (n.d.). Be Safe: An App for People Using Alone. https://www.brave.coop/besafe
- ³⁵ Mace, S., Siegler, A., & Wu, K. (2021, March). National Council for Mental Wellbeing. COVID-19 Pandemic Impact on Harm Reduction Services: An Environmental Scan. https://www.thenationalcouncil.org/wp-content/uploads/2021/03/Harm-Reduction-Environ-Scan.pdf?daf=375ateTbd56
- ³⁶ Joudrey, P. J., Adams, Z. M., Bach, P., Van Buren, S., Chaiton, J. A., Ehrenfeld, L., Guerra, M. E., Gleeson, B., Kimmel, S. D., Medley, A., Mekideche, W., Paquet, M., Sung, M., Wang, M., Kheang, R. O., Zhang, J., Wang, E. A., & Eldelman, J. (2021). Methadone access for Opioid Use Disorder during the COVID-19 pandemic within the United States and Canada. JAMA Network Open, 4(7), e2118223.
- ³⁷ Harris, M., Johnson, S., Mackin, S., Saitz, R., Walley, A. Y., & Taylor, J. L. (2020). Low barrier tele-buprenorphine in the time of COVID-19: A Case Report. Journal of Addiction Medicine, 14(4), e136-e138. https://doi.org/10.1097/ADM.0000000000000082
- ³⁸ Levander, X. A., Wheelock, H., Pope, J., Lee, A., Hartmann, K., Abuelkhair, S., Gregg, J. L., & Buchheit, B. M. (2021). Low-threshold buprenorphine via community partnerships and telemedicine—Case reports of expanding access to addiction treatment during COVID-19. Journal of Addiction Medicine. Advance online publication. https://doi.org/10.1097/ADM.0000000000000001
- ³⁹ Castillo, M., Conte, B., Hinkes, S., Mathew, M., Na, C. J., Norindr, A., Serota, D. P., Forrest, D. W., Deshpande, A. R., Bartholomew, T. S., & Tookes, H. E. (2020). Implementation of a medical student-run telemedicine program for medications for opioid use disorder during the COVID-19 pandemic. Harm Reduction Journal, 17, 88. https://doi.org/10.1186/s12954-020-00438-4
- ⁴⁰ Tringale, R. & Subica, A. M. (2021). COVID-19 innovations in medication for addiction treatment at a Skid Row syringe exchange. Journal of Substance Abuse Treatment, 121, 108181. https://doi.org/10.1016/j.jsat.2020.108181
- ⁴¹ American Academy of Addiction Psychiatry. (2020, October 15). First glance: COVID-19 Buprenorphine Provider Survey Report. https://www.aaap.org/wp-content/uploads/2020/10/COVID-29-Survey-Results-First-Glance_EW-10.15.pdf
- ⁴² Jones, C. M., Diallo, M. M., Vythilingam, M., Schier, J. G., Eisenstat, M., & Compton, W. M. (2021). Characteristics and correlates of U.S. clinicians prescribing buprenorphine for opioid use disorder treatment using expanded authorities during the COVID-19 pandemic. Drug and Alcohol Dependence, 225, 108783.
- ⁴³ Jones, C. M., Diallo, M. M., Vythilingam, M., Schier, J. G., Eisenstat, M., & Compton, W. M. (2021). Characteristics and correlates of U.S. clinicians prescribing buprenorphine for opioid use disorder treatment using expanded authorities during the COVID-19 pandemic. Drug and Alcohol Dependence, 225, 108783.
- ⁴⁴ Jones, C. M., Diallo, M. M., Vythilingam, M., Schier, J. G., Eisenstat, M., & Compton, W. M. (2021). Characteristics and correlates of U.S. clinicians prescribing buprenorphine for opioid use disorder treatment using expanded authorities during the COVID-19 pandemic. Drug and Alcohol Dependence, 225, 108783.
- ⁴⁵ Castillo, M., Conte, B., Hinkes, S., Mathew, M., Na, C. J., Norindr, A., Serota, D. P., Forrest, D. W., Deshpande, A. R., Bartholomew, T. S., & Tookes, H. E. (2020). Implementation of a medical student-run telemedicine program for medications for opioid use disorder during the COVID-19 pandemic. Harm Reduction Journal, 17, 88. https://doi.org/10.1186/s12954-020-00438-4

- ⁴⁶ SAMHSA. (2021, June). Telehealth for the Treatment of Serious Mental Illness and Substance Use Disorders. SAMHSA Publication No. PEP21-06-02-001. https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP21-06-02-001.pdf
- ⁴⁷ Guille, C., Simpson, A. N., Douglas, E., Boyars, L., Cristaldi, K., McElligott, J., Johnson, D., & Brady, K. (2020). Treatment of opioid use disorder in pregnant women via telemedicine: A nonrandomized controlled trial. JAMA Network Open, 3(1), e1920177. https://doi.org/10.1001/jamanetworkopen.2019.20177
- ⁴⁸ Weintraub, E., Greenblatt, A. D., Chang, J., Welsh, C. J., Berthiaume, A. P., Goodwin, S. R., Arnold, R., Himelhoch, S. S., Bennett, M. E., & Belcher, A. M. (2021). Outcomes for patients receiving telemedicine-delivered medication-based treatment for Opioid Use Disorder: A retrospective chart review. Heroin Addiction and Related Clinical Protocols, 23(2), 5-12.
- ⁴⁹ King, V. L., Brooner, R. K., Peirce, J. M., Kolodner, K., & Kidorf, M. S. (2013). A randomized trial of Web-based videoconferencing for substance abuse counseling. Journal of Substance Abuse Treatment, 46, 36-42.
- ⁵⁰ Lin, L., Casteel, D., Shigekawa, E., Weyrich, M. S., Roby, D. H., & McMenamin, S. B. (2019). Telemedicine-delivered treatment interventions for substance use disorders: A systematic review. Journal of Substance Abuse Treatment, 101, 38-49.
- ⁵¹ Cole, T. O., Robinson, D., Kelley-Freeman, A., Gandhi, D., Greenblatt, A. D., Weintraub, E., & Belcher, A. M. (2021). Patient satisfaction with medications for Opioid Use Disorder treatment via telemedicine: Brief literature review and development of a new assessment. Frontiers in Public Health, 8, 557275.
- ⁵² Khatri, U., Davis, C. S., Krawczyk, N., Lynch, M., Berk, J., & Samuels, E. (2020, September 11). These key telehealth policy changes would improve buprenorphine access while advancing health equity. Health Affairs Blog. https://www.healthaffairs.org/do/10.1377/hblog20200910.498716/full/
- ⁵³ A Call for Equity, Telehealth to Improve Buprenorphine Access Sign on Letter. (2021). https://brown.co1.qualtrics.com/jfe/form/SV_eqCFPfo4BDYcrjL
- ⁵⁴ American Academy of Addiction Psychiatry. (2020, October 15). First glance: COVID-19 Buprenorphine Provider Survey Report. https://www.aaap.org/wp-content/uploads/2020/10/COVID-29-Survey-Results-First-Glance_EW-10.15.pdf
- ⁵⁵ McDonnell, A., MacNeill, C., Chapman, B., Gilbertson, N., Reinhardt, M., & Carreiro, S. (2021). Leveraging digital tools to support recovery from substance use disorder during the COVID-19 pandemic response. Journal of Substance Abuse Treatment, 124, 108226. https://doi.org/10.1016/j.jsat.2020.108226
- ⁵⁶ Liese, B. S. & Monley, C. M. (2021). Providing addiction services during a pandemic: Lessons learned from COVID-19. Journal of Substance Abuse Treatment, 120, 108156. https://doi.org/10.1016/j.jsat.2020.108156
- ⁵⁷ Bergman, B. G. & Kelly, J. F. (2021). Online digital recovery support services: An overview of the science and their potential to help individuals with substance use disorder during COVID-19 and beyond. Journal of Substance Abuse Treatment, 120, 108152. https://doi.org/10.1016/j.jsat.2020.108152
- ⁵⁸ Fortuna, K. L., Myers, A. L., Walsh, D., Walker, D., Walker, R., Mois, G., & Brooks, J. M. (2020). Strategies to increase peer support specialists' capacity to use digital technology in the era of COVID-19: Pre-post study. JMIR Mental Health, 7(7), e20429.
- ⁵⁹ Bergman, B. G. & Kelly, J. F. (2021). Online digital recovery support services: An overview of the science and their potential to help individuals with substance use disorder during COVID-19 and beyond. Journal of Substance Abuse Treatment, 120, 108152.
- ⁶⁰ Campbell, W., Hester, R. K., Lenberg, K. L., & Delaney, H. D. (2016). Overcoming addictions, a web-based application, and SMART recovery, an online and in-person mutual help group for problem drinkers, Part 2: Six-month outcomes of a randomized controlled trial and qualitative feedback from participants. Journal of Medical Internet Research, 18(10), e262.
- ⁶¹ Schlosser, A. & Harris, S. (2020). Care during COVID-19: Drug use, harm reduction, and intimacy during a global pandemic. International Journal of Drug Policy, 83, 102896.

- ⁶² American Academy of Addiction Psychiatry. (2020, October 15). First glance: COVID-19 Buprenorphine Provider Survey Report. https://www.aaap.org/wp-content/uploads/2020/10/COVID-29-Survey-Results-First-Glance_EW-10.15.pdf
- ⁶³ Uscher-Pines, L., Sousa, J., Raja, P., Mehorotra, A., Barnett, M., & Huskamp, H. A. (2020). Treatment of opioid use disorder during COVID-19: Experiences of clinicians transitioning to telemedicine. Journal of Substance Abuse Treatment, 118, 108124.
- ⁶⁴ Mace, S., Cadovius, N., Abbondandolo, G., & Brown, C. (2021, February). Telebehavioral Health Workforce Opportunities During the COVID-19 Pandemic. University of Michigan Behavioral Health Workforce Research Center. https://www.healthworkforceta.org/research-alerts/telebehavioral-health-workforce-opportunities-during-the-covid-19-pandemic/
- ⁶⁵ Treitler, P. C., Bowden, C. F., Lloyd, J., Enich, M., Nyaku, A. N., & Crystal, S. (2021). Perspectives of opioid use disorder treatment providers during COVID-19: Adapting to flexibilities and sustaining reforms. Journal of Substance Abuse Treatment, 132, 108514.
- ⁶⁶ Aronson, I. D., Bennett, A. S., & Freeman, R. (2020). Toward a human-centered use of technology: A stakeholder analysis of harm reduction and CBO staff. Harm Reduction Journal, 17(77).
- ⁶⁷ McClure, E. A., Acquavita, S. P., Harding, E., & Stitzer, M. L. (2012). Utilization of communication technology by patients enrolled in substance abuse treatment. Drug and Alcohol Dependence, 129(1-2), 145-150.
- ⁶⁸ Vogels, E. A. (2021, June 22). Digital divide persists even as Americans with lower incomes make gains in tech adoption. Pew Research Center. https://www.pewresearch.org/fact-tank/2021/06/22/digital-divide-persists-even-as-americans-with-lower-incomes-make-gains-in-tech-adoption/
- ⁶⁹ Vogels, E. A. (2021, June 22). Digital divide persists even as Americans with lower incomes make gains in tech adoption. Pew Research Center. https://www.pewresearch.org/fact-tank/2021/06/22/digital-divide-persists-even-as-americans-with-lower-incomes-make-gains-in-tech-adoption/
- ⁷⁰ Perrin, A. & Turner, E. (2019). Smartphones help blacks, Hispanics bridge some but not all digital gaps with whites. FactTank: News in the Numbers.
- ⁷¹ Perrin, A. (2019, May 31). Digital gap between rural and nonrural America persists. Pew Research Center.
- ⁷² Anderson, M. & Perrin, A. (2017, April 7). Disabled Americans are less likely to use technology. Pew Research Center.
- ⁷³ McClure, E. A., Acquavita, S. P., Harding, E., & Stitzer, M. L. (2012). Utilization of communication technology by patients enrolled in substance abuse treatment. Drug and Alcohol Dependence, 129(1-2), 145-150.
- ⁷⁴ McClure, E. A., Acquavita, S. P., Harding, E., & Stitzer, M. L. (2012). Utilization of communication technology by patients enrolled in substance abuse treatment. Drug and Alcohol Dependence, 129(1-2), 145-150.
- ⁷⁵ Uscher-Pines, L., Sousa, J., Raja, P., Mehorotra, A., Barnett, M., & Huskamp, H. A. (2020). Treatment of opioid use disorder during COVID-19: Experiences of clinicians transitioning to telemedicine. Journal of Substance Abuse Treatment, 118, 108124.
- ⁷⁶ Buchheit, B. M., Wheelock, H., Lee, A., Brandt, K., & Gregg, J. (2021). Low-barrier buprenorphine during the COVID-19 pandemic: A rapid transition to on-demand telemedicine with wide-ranging effects. Journal of Substance Abuse Treatment, 131, 108444.
- ⁷⁷ Mace, S., Cadovius, N., Abbondandolo, G., & Brown, C. (2021, February). Telebehavioral Health Workforce Opportunities During the COVID-19 Pandemic. University of Michigan Behavioral Health Workforce Research Center. https://www.healthworkforceta.org/research-alerts/telebehavioral-health-workforce-opportunities-during-the-covid-19-pandemic/

- ⁷⁸ Mace, S., Cadovius, N., Abbondandolo, G., & Brown, C. (2021, February). Telebehavioral Health Workforce Opportunities During the COVID-19 Pandemic. University of Michigan Behavioral Health Workforce Research Center. https://www.healthworkforceta.org/research-alerts/telebehavioral-health-workforce-opportunities-during-the-covid-19-pandemic/
- ⁷⁹ Khatri, U., Davis, C. S., Krawczyk, N., Lynch, M., Berk, J., & Samuels, E. (2020, September 11). These key telehealth policy changes would improve buprenorphine access while advancing health equity. Health Affairs Blog. https://www.healthaffairs.org/do/10.1377/hblog20200910.498716/full/
- ⁸⁰ Mace, S., Cadovius, N., Abbondandolo, G., & Brown, C. (2021, February). Telebehavioral Health Workforce Opportunities During the COVID-19 Pandemic. University of Michigan Behavioral Health Workforce Research Center. https://www.healthworkforceta.org/research-alerts/telebehavioral-health-workforce-opportunities-during-the-covid-19-pandemic/
- ⁸¹ Buchheit, B. M., Wheelock, H., Lee, A., Brandt, K., & Gregg, J. (2021). Low-barrier buprenorphine during the COVID-19 pandemic: A rapid transition to on-demand telemedicine with wide-ranging effects. Journal of Substance Abuse Treatment, 131, 108444.
- ⁸² Mace, S., Cadovius, N., Abbondandolo, G., & Brown, C. (2021, February). Telebehavioral Health Workforce Opportunities During the COVID-19 Pandemic. University of Michigan Behavioral Health Workforce Research Center. https://www.healthworkforceta.org/research-alerts/telebehavioral-health-workforce-opportunities-during-the-covid-19-pandemic/
- ⁸³ Buchheit, B. M., Wheelock, H., Lee, A., Brandt, K., & Gregg, J. (2021). Low-barrier buprenorphine during the COVID-19 pandemic: A rapid transition to on-demand telemedicine with wide-ranging effects. Journal of Substance Abuse Treatment, 131, 108444.
- ⁸⁴ Uscher-Pines, L., Sousa, J., Raja, P., Mehorotra, A., Barnett, M., & Huskamp, H. A. (2020). Treatment of opioid use disorder during COVID-19: Experiences of clinicians transitioning to telemedicine. Journal of Substance Abuse Treatment, 118, 108124.
- ⁸⁵ Page, C., Haffajee, R., Lin, L., Buche, J., Beck, A. J., & Gaiser, M. (2019, December). Access to Treatment for Opioid Use Disorder: A Survey of Addiction Medicine Physicians on Telemedicine and Medication-Assisted Treatment. University of Michigan Behavioral Health Workforce Research Center. https://www.behavioralhealthworkforce.org/wp-content/uploads/2020/08/Access-to-Treatment-for-Opioid-Use-Disorder_A-Survey-of-Addiction-Medicine-Physicians-on-Telemedicine-and-Medication-Assisted-Treatment_Full.pdf
- ⁸⁶ Aronson, I. D., Bennett, A. S. & Freeman, R. (2020). Toward a human-centered use of technology: A stakeholder analysis of harm reduction and CBO staff. Harm Reduction Journal, 17(77).
- ⁸⁷ Uscher-Pines, L., Sousa, J., Raja, P., Mehrotra, A., Barnett, M., & Huskamp, H. A. (2020). Treatment of opioid use disorder during COVID-19: Experiences of clinicians transitioning to telemedicine. Journal of Substance Abuse Treatment, 118, 108124.
- 88 Harris, M., Johnson, S., Mackin, S., Saitz, R., Walley, A. Y., & Taylor, J. L. (2020). Low barrier tele-buprenorphine in the time of COVID-19: A case report. Journal of Addiction Medicine, 1-3.
- ⁸⁹ Treitler, P. C., Bowden, C. F., Lloyd, J., Enich, M., Nyaku, A. N., & Crystal, S. (2021). Perspectives of opioid use disorder treatment providers during COVID-19: Adapting to flexibilities and sustaining reforms. Journal of Substance Abuse Treatment, 132, 108514.
- 90 U.S. Department of Health and Human Services (HHS) Office of Assistant Secretary for Planning and Evaluation. (2018, November). Using Telehealth to Support Opioid Use Disorder Treatment. https://aspe.hhs.gov/system/files/pdf/260276/OUDTeleIB.pdf
- ⁹¹ Aronson, I. D., Bennett, A. S. & Freeman, R. (2020). Toward a human-centered use of technology: A stakeholder analysis of harm reduction and CBO staff. Harm Reduction Journal, 17(77).
- ⁹² Buchheit, B. M., Wheelock, H., Lee, A., Brandt, K., & Gregg, J. (2021). Low-barrier buprenorphine during the COVID-19 pandemic: A rapid transition to on-demand telemedicine with wide-ranging effects. Journal of Substance Abuse Treatment, 131, 108444.

- 93 Universal Service Administrative Co. (2021). Get Connected. https://www.lifelinesupport.org/
- ⁹⁴ Universal Service Administrative Co. (2021). How to Prove Income. https://www.lifelinesupport.org/do-i-qualify/how-to-prove-income/
- 95 Universal Service Administrative Co. (2021, June 28). COVID-19 Response. https://www.usac.org/lifeline/resources/covid-19-response/#more-flexibility
- 96 Universal Service Administrative Co. (2201). How to Get Lifeline. https://www.lifelinesupport.org/how-to-get-lifeline/
- 97 Federal Communications Commission. (2021). Emergency Broadband Benefit. https://www.fcc.gov/broadbandbenefit
- ⁹⁸ Universal Service Administrative Co. (2021). What is the Emergency Broadband Benefit Program? The Emergency Broadband Benefit Program.
- 99 Federal Communications Commission. (2021). Emergency Broadband Benefit. https://www.fcc.gov/broadbandbenefit
- ¹⁰⁰ Martin, S. L., English, K. T., Clark, K. A., Cilenti, D., & Kupper, L. L. (1996). Violence and substance use among North Carolina pregnant women. American Journal of Public Health, 86(7), 991-998.
- ¹⁰¹ Soper, R. G. (2014, October 6). Intimate Partner Violence and Co-Occurring Substance Abuse/Addiction. American Society of Addiction Medicine. https://www.asam.org/Quality-Science/publications/magazine/read/article/2014/10/06/intimate-partner-violence-and-co-occurring-substance-abuse-addiction
- ¹⁰² Cafferky, B. M., Mendez, M., Anderson, J. R., & Stith, S. M. (2018). Substance use and intimate partner violence: A meta-analytic review. Psychology of Violence, 8(1), 110-131.
- ¹⁰³ Verizon Wireless. (n.d.). HopeLine Program from Verizon Wireless. http://preview.thenewsmarket.com/Previews/VERI/DocumentAssets/192767.pdf
- ¹⁰⁴ PCs for People. (2021). https://www.pcsforpeople.org/
- ¹⁰⁵ PCs for People. (2021). PCs for People Locations. https://www.pcsforpeople.org/locations/
- 106 PCs for People. (2021). Are you eligible? https://www.pcsforpeople.org/eligibility/
- ¹⁰⁷ Tringale, R. & Subica, A. M. (2020). COVID-19 innovations in medication for addiction treatment at a Skid Row syringe exchange. Journal of Substance Abuse Treatment, 121. https://doi.org/10.1016/j.jsat.2020.108181
- ¹⁰⁸ Tringale, R. & Subica, A. M. (2020). COVID-19 innovations in medication for addiction treatment at a Skid Row syringe exchange. Journal of Substance Abuse Treatment, 121. https://doi.org/10.1016/j.jsat.2020.108181
- ¹⁰⁹ NSI Strategies. (2021). Patient Guidelines and Tips for a Telehealth Visit. https://www.nsistrategies.com/telehealth
- 110 Ophelia. (2021). https://ophelia.com/
- "Centers for Medicare and Medicaid Services. (2021, March). Telehealth for Providers: What You Need to Know. https://www.cms.gov/files/document/telehealth-toolkit-providers.pdf
- ¹¹² Upper Midwest Telehealth Resource Center. (2020). Understanding Proper Engagement, Telehealth Interactions. https://3f9znz109u3oybcpa3vow591-wpengine.netdna-ssl.com/wp-content/uploads/2021/05/Telehealth_Interactions.pdf

- ¹¹³ Michigan Department of Health and Human Services & Get Setup. (2021). Michigan Learning Channel. https://www.getsetup.io/partner/michigan
- ¹¹⁴ Michigan Department of Health and Human Services. (2021). Older Adults Can Learn How to Use Videoconferencing, Telemedicine and Other Technology. https://www.michigan.gov/som/0,4669,7-192-29942_73920_74076-542484--,00.html
- ¹¹⁵ Health Information Technology, Evaluation, and Quality Center (HITEQ). (2020, June). Telehealth Resources for Patients with Limited English Proficiency in Health Centers. https://hiteqcenter.apps.plantanapp.com/Resources/HITEQ-Resources/telehealth-strategies-and-resources-for-serving-patients-with-limited-english-proficiency
- ¹¹⁶ Gallego-Adkins, M. (2021, January 20). Turning COVID-19 Challenges into Opportunities: Telebehavioral Health within Latino Communities. https://www.thenationalcouncil.org/BH365/2021/01/20/turning-covid-19-challenges-into-opportunities-telebehavioral-health-within-latino-communities/
- The straining of the st
- 118 Hennepin Healthcare. (2021). Video Visits. https://www.hennepinhealthcare.org/videovisits/
- ¹¹⁹ The Kraft Center for Community Health and Massachusetts General Hospital. (2020). Kraft Center for Community Health Mobile Addiction Services Toolkit. http://www.kraftcommunityhealth.org/wp-content/uploads/2020/01/Kraft-Center-Mobile-Addiction-Services-Toolkit.pdf
- ¹²⁰ Aronson, I. D., Bennett, A. S. & Freeman, R. (2020). Toward a human-centered use of technology: A stakeholder analysis of harm reduction and CBO staff. Harm Reduction Journal, 17(77).
- ¹²¹ Aronson, I. D., Bennett, A. S. & Freeman, R. (2020). Toward a human-centered use of technology: A stakeholder analysis of harm reduction and CBO staff. Harm Reduction Journal, 17(77).
- ¹²² Aronson, I. D., Bennett, A. S. & Freeman, R. (2020). Toward a human-centered use of technology: A stakeholder analysis of harm reduction and CBO staff. Harm Reduction Journal, 17(77).
- ¹²³ Uscher-Pines, L., Sousa, J., Raja, P., Mehorotra, A., Barnett, M., & Huskamp, H. A. (2020). Treatment of opioid use disorder during COVID-19: Experiences of clinicians transitioning to telemedicine. Journal of Substance Abuse Treatment, 118, 108124.
- 124 Digital Peer Support. (2021). Digital Peer Support Certifications. https://digitalpeersupport.org/certification/
- ¹²⁵ Center for Health and Social Care Integration. (2021, February). Tele-social Care: Implications and Strategies. https://static1. squarespace.com/static/5a9d6ae6af2o96ecf434a2d1/t/6o2d63c9o364970ec5b98f51/1613587402427/Tele-Social+Care_Implications+and+Strategies_Final.pdf
- ¹²⁶ Unity Recovery. (2020). Telerecovery Guide and SOP. https://www.opioidlibrary.org/wp-content/uploads/2020/04/Unity-Recovery-Telerecovery-RSS-Guide-03-26-2020.pdf
- ¹²⁷ HHS, Office of Civil Rights. (2021, January 20). Notification of Enforcement Discretion for Telehealth Remote Communications During the COVID-19 Nationwide Public Health Emergency. https://www.hhs.gov/hipaa/for-professionals/special-topics/emergency-preparedness/notification-enforcement-discretion-telehealth/index.html
- ¹²⁸ HHS, Office of Civil Rights. (2021, January 20). Notification of Enforcement Discretion for Telehealth Remote Communications During the COVID-19 Nationwide Public Health Emergency. https://www.hhs.gov/hipaa/for-professionals/special-topics/emergency-preparedness/notification-enforcement-discretion-telehealth/index.html

- ¹²⁹ HHS, Office of Civil Rights. (n.d.). FAQs on Telehealth and HIPAA during the COVID-19 Nationwide Public Health Emergency. https://www.hhs.gov/sites/default/files/telehealth-faqs-508.pdf
- ¹³⁰ SAMHSA. (2021). Telehealth for the Treatment of Serious Mental Illness and Substance Use Disorders. https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP21-06-02-001.pdf
- ¹³¹ HITEQ. (2020, March 25). Telehealth: Using non-traditional technology for telehealth during the COVID-19 Pandemic. https://www.careinnovations.org/wp-content/uploads/2-HITEQ-Non-Traditional-Telehealth-Tools-during-COVID-19.pdf
- ¹³² NEXT Distro. (2021). Mail-Based Syringe Access During COVID-19: Abridged Guide for Syringe Access Programs. https://nextdistro.org/covid19guide
- 133 NEXT Distro. (2021). https://nextdistro.org/
- ¹³⁴ Hayes, B. T., Favaro, J., Davis, C. S., Gonsalves, G. S., Beletsky, L., Vlahov, D., Heimer, R., & Fox, A. D. (2021). Harm reduction, by mail: The next step in promoting the health of people who use drugs. Journal of Urban Health. https://doi.org/10.1007/s11524-021-00534-1
- ¹³⁵ Yang, C., Favaro, J., & Meacham, M. (2021). NEXT Harm Reduction: An online, mail-based naloxone distribution and harm reduction program. American Journal of Public Health, 111(4), 667-671.
- ¹³⁶ Pytell, J. D. & Rastegar, D. A. (2021). Down the drain: Reconsidering routine urine drug testing during the COVID-19 pandemic. Journal of Substance Abuse Treatment, 120, 108155.
- ¹³⁷ Khatri, U. G. & Aronowitz, S. V. (2021). Considering the harms of our habits: The reflexive urine drug screen in opioid use disorder treatment. Journal of Substance Abuse Treatment, 123, 108258.
- ¹³⁸ Tringale, R. & Subica, A. M. (2020). COVID-19 innovations in medication for addiction treatment at a Skid Row syringe exchange. Journal of Substance Abuse Treatment, 121. https://doi.org/10.1016/j.jsat.2020.108181
- 139 Never Use Alone. (2021). https://neverusealone.com/
- ¹⁴⁰ Wu, N. (2021, July 26). Federal funding to provide telehealth services at 15 Hawaii libraries. Star Advertiser. https://www.staradvertiser.com/2021/07/26/breaking-news/federal-funding-to-provide-telehealth-services-at-15-hawaii-libraries/
- ¹⁴¹ SAMHSA. (2021). Telehealth for the Treatment of Serious Mental Illness and Substance Use Disorders. https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP21-06-02-001.pdf
- ¹⁴² CDC. (2020). Syringe Services Programs: A Technical Package of Effective Strategies and Approaches for Planning, Design, and Implementation. https://www.cdc.gov/ssp/docs/SSP-Technical-Package.pdf
- ¹⁴³ Page, C., Haffajee, R., Lin, L., Buche, J., Beck, A. J., & Gaiser, M. (2019, December). Access to Treatment for Opioid Use Disorder: A Survey of Addiction Medicine Physicians on Telemedicine and Medication-Assisted Treatment. University of Michigan Behavioral Health Workforce Research Center. https://www.behavioralhealthworkforce.org/wp-content/uploads/2020/08/Access-to-Treatment-for-Opioid-Use-Disorder_A-Survey-of-Addiction-Medicine-Physicians-on-Telemedicine-and-Medication-Assisted-Treatment_Full.pdf
- ¹⁴⁴ RTI International. (2018, November). Using Telehealth to Support Opioid Use Disorder Treatment. ASPE Issue Brief. https://aspe.hhs.gov/system/files/pdf/260276/OUDTeleIB.pdf
- ¹⁴⁵ Kilaru, A. S., Xiong, A., Lowenstein, M., Meisel, Z. F., Perrone, J., Khatri, U., Mitra, N., & Delgado, K. (2020). Incidence of treatment of opioid use disorder following nonfatal overdose in commercially insured patients. JAMA Network Open, 3(5), e205852.

- ¹⁴⁶ Goedel, W. C., Shapiro, A., Cerda, M., Tsai, J. W., Hadland, S. E., & Marshall, B. D. (2020). Association of racial/ethnic segregation with treatment capacity for opioid use disorder in counties in the United States. JAMA Network Open, 3(4), e203711.
- ¹⁴⁷ SAMHSA. (2020). The Opioid Crisis and the Black/African American Population: An Urgent Issue. https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP20-05-02-001_508%20Final.pdf
- ¹⁴⁸ Lieberman, A. & Davis, C. (2021, April 21). Access to Treatment for Individuals with Opioid Use Disorder. https://www.networkforphl.org/resources/access-to-treatment-for-individuals-with-opioid-use-disorder/
- ¹⁴⁹ Khatri, U., Davis, C. S., Krawczyk, N., Lynch, M., Berk, J., & Samuels, E. A. (2020, September 11). These key telehealth policy changes would improve buprenorphine access while advancing health equity. Health Affairs Blog. https://www.healthaffairs.org/do/10.1377/hblog20200910.498716/full/
- 150 Maine Access Points. (2021). https://www.maineaccesspoints.org/
- ¹⁵¹ Mills, J. T. (2020, March 30). An Order Regarding State Certified Hypodermic Apparatus Exchange Programs. Executive Order. https://www.maine.gov/governor/mills/sites/maine.gov.governor.mills/files/inline-files/EO%2027.pdf
- ¹⁵² CDC. (2020). Telehealth Modalities. https://www.cdc.gov/coronavirus/2019-ncov/hcp/telehealth.html
- 153 The Colorado Health Foundation. (2016). Telehealth Glossary. https://coloradohealth.org/insights/stories/telehealth-glossary
- 154 National Institute of Standards and Technology. (2021). Computer Security Resource Center. https://csrc.nist.gov/glossary
- 155 National Institute of Standards and Technology. (2021). Computer Security Resource Center. https://csrc.nist.gov/glossary
- ¹⁵⁶ Center for Connected Health Policy. (2021). Live Video. https://www.cchpca.org/what-is-telehealth/?category=live-video
- 157 Center for Connected Health Policy. (2021). Mobile Health. https://www.cchpca.org/what-is-telehealth/?category=mobile-health
- ¹⁵⁸ The Colorado Health Foundation. (2016). Telehealth Glossary. https://coloradohealth.org/insights/stories/telehealth-glossary
- ¹⁵⁹ The Colorado Health Foundation. (2016). Telehealth Glossary. https://coloradohealth.org/insights/stories/telehealth-glossary
- 160 The Colorado Health Foundation. (2016). Telehealth Glossary. https://coloradohealth.org/insights/stories/telehealth-glossary
- ¹⁶¹ Center for Connected Health Policy. (2021). Remote Patient Monitoring. https://www.cchpca.org/what-is-telehealth/?category=remote-patient-monitoring
- ¹⁶² Center for Connected Health Policy. (2021). Store-and-Forward. https://www.cchpca.org/what-is-telehealth/?category=store-and-forward
- ¹⁶³ CDC. (2020). Telehealth Modalities. https://www.cdc.gov/coronavirus/2019-ncov/hcp/telehealth.html
- 164 Center for Connected Health Policy. (2021). What is telehealth? https://www.cchpca.org/what-is-telehealth/
- ¹⁶⁵ American Academy of Family Physicians. (2021).What's the difference between telemedicine and telehealth? https://www.aafp.org/news/media-center/kits/telemedicine-and-telehealth.html
- 166 The Colorado Health Foundation. (2016). Telehealth Glossary. https://coloradohealth.org/insights/stories/telehealth-glossary
- ¹⁶⁷ American Psychiatric Association. (2020). What is Telepsychiatry? https://www.psychiatry.org/patients-families/what-is-telepsychiatry

- ¹⁶⁸ Center for Health and Social Care Integration. (2021, February). Tele-social Care: Implications and Strategies. https://static1. squarespace.com/static/5a9d6ae6af2o96ecf434a2d1/t/6o2d63c9o364970ec5b98f51/1613587402427/Tele-Social+Care_Implications+and+Strategies_Final.pdf
- ¹⁶⁹ Center for Health and Social Care Integration. (2018, August 29). Person-Centered Telephonic Interventions: Opportunities and Challenges. https://static1.squarespace.com/static/5a9d6ae6af2096ecf434a2d1/t/5bca132971c10be3 da187532/1539969839071/CHaSCI+Community_August+2018_Telephonic+interventions.pdf
- ¹⁷⁰ Schlosser, A. & Harris, S. (2020, September). Care during COVID-19: Drug use, harm reduction, and intimacy during a global pandemic. International Journal of Drug Policy, 83, 102896. https://doi.org/10.1016/j.drugpo.2020.102896
- ¹⁷¹ Key informant data.
- ¹⁷² Schlosser, A. & Harris, S. (2020, September). Care during COVID-19: Drug use, harm reduction, and intimacy during a global pandemic. International Journal of Drug Policy, 83, 102896. https://doi.org/10.1016/j.drugpo.2020.102896
- ¹⁷³ Harm Reduction Center: Las Vegas. (2021). Trac-B Exchange. https://www.harmreductioncenterlv.com/
- ¹⁷⁴ DeMio, T. (2021, March 8). Ohio's first harm reduction vending machine helps promote safer sex, safer smoking, safer injection. Cincinnati Enquirer. https://www.cincinnati.com/story/news/2021/03/08/vending-machine-safer-sex-drug-use-supplies-overdose-hiv-prevention-ohio/4592675001/
- ¹⁷⁵ Lockard, R. A., Priest, K. C., Brown, P. C.M., Graveson, A., & Englander, H. (2020). Addressing a rapidly changing service landscape during the COVID-19 pandemic: Creation of the Oregon substance use disorder resource collaborative. Journal of Substance Abuse Treatment. Article in Press.
- ¹⁷⁶ Castillo, M., Conte, B., Hinkes, S., Mathew, M., Na, C. J., Norindr, A., Serota, D. P., Forrest, D. W., Deshpande, A. R., Bartholomew, T. S., & Tookes, H. E. (2020). Implementation of a medical student-run telemedicine program for medications for opioid use disorder during the COVID-19 pandemic. Harm Reduction Journal, 17, 88. https://doi.org/10.1186/s12954-020-00438-4
- ¹⁷⁷ Key informant data.
- ¹⁷⁸ Tringale, R. & Subica, A. M. (2020). COVID-19 innovations in medication for addiction treatment at a Skid Row syringe exchange. Journal of Substance Abuse Treatment, 121, 108181. https://doi.org/10.1016/j.jsat.2020.108181
- ¹⁷⁹ McDonnell, A., MacNeill, C., Chapman, B., Gilbertson, N., Reinhardt, M., & Carreiro, S. (2020). Leveraging digital tools to support recovery from substance use disorder during the COVID-19 pandemic response. Journal of Substance Abuse Treatment. Article in press.
- ¹⁸⁰ Liese, B. S. & Monley, C. M. (2021). Providing addiction services during a pandemic: Lessons learned from COVID-19. Journal of Substance Abuse Treatment, 120, 108156. https://doi.org/10.1016/j.jsat.2020.108156
- ¹⁸¹ Samuels, E. A., Clark, S. A., Wunsch, C., Jordison Keeler, L. A., Reddy, N., Vanjani, R., & Wightman, R. S. (2020). Innovation during COVID-19: Improving addiction treatment access. Journal of Addiction Medicine, 14(4), e8–e9. https://doi.org/10.1097/ADM.000000000000685
- ¹⁸² Tringale, R. & Subica, A. M. (2020). COVID-19 innovations in medication for addiction treatment at a Skid Row syringe exchange. Journal of Substance Abuse Treatment, 121, 108181. https://doi.org/10.1016/j.jsat.2020.108181

- ¹⁸³ Glick, S. N., Prohaska, S. M., LaKosky, P. A., Juarez, A. M., Corcorran, M. A., & Des Jarlais, D. C. (2020, April 24). The impact of COVID-19 on syringe services programs in the United States. AIDS and Behavior, 1-3. Advance online publication. https://doi.org/10.1007/s10461-020-02886-2
- ¹⁸⁴ Collins, A. B., Ndoye, C. D., Arene-Morley, D., & Marshall, B. D. L. (2020). Addressing co-occurring public health emergencies: The importance of naloxone distribution in the era of COVID-19. International Journal of Drug Policy, 83, 102872. https://doi.org/10.1016/j.drugpo.2020.102872
- ¹⁸⁵ Key informant data.
- ¹⁸⁶ Harris, M., Johnson, S., Mackin, S., Saitz, R., Walley, A. Y., & Taylor, J. L. (2020). Low barrier tele-buprenorphine in the time of COVID-19: A case report. Journal of Addiction Medicine, 14(4), e136-e138. https://doi.org/10.1097/ADM.0000000000000682
- ¹⁸⁷ Harris, M., Johnson, S., Mackin, S., Saitz, R., Walley, A. Y., & Taylor, J. L. (2020). Low barrier tele-buprenorphine in the time of COVID-19: A case report. Journal of Addiction Medicine, 14(4), e136-e138. https://doi.org/10.1097/ADM.0000000000000682