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Telehealth for Healthcare Providers

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Learning Goals

1. Recall standards of care for the provision of telehealth services
2. Summarize relevant research on the use and effectiveness of telehealth
3. Summarize a set-up plan for the provision of effective telehealth interventions

My Experience as a Telehealth Service Provider

- Licensed psychologist in Texas (#37009) and board-certified psychologist (#9423)
- I have a small private practice, which is entirely telehealth
- I was using telehealth pre-COVID, and then my practice stayed telehealth-based after COVID restrictions were lifted

Coronavirus disease (COVID)

Why Use Telehealth?

- Why use telehealth?
  - Options for clients
    - Easier access to care for many populations
      - Rural populations, people who are employed normal hours, and new parents
      - No dealing with traffic or public transit, no having to manage childcare to make an appointment
      - Regularly covered by insurance panels
  - Options for providers
    - More (not necessarily easier!) options for service provision
      - Can provide services from a home office without the need to make a home office for in-person patient visits

Why Use Telehealth?

- If a provider has unique training, they can reach clients who would be out of reach normally
  - For example, LGBT patients in rural areas may struggle to find an affirming and knowledgeable provider nearby
  - Providers trained in specific modes of intervention may be able to reach a wider patient base

Definitions

Telehealth

- Telehealth generally focuses on the use of technology to remotely access healthcare services
  - In behavioral health interventions, telehealth generally involves the use of technology to communicate with a provider in real time
  - Essentially, this replicates traditional healthcare services using remote services

Telehealth

- First — how is telehealth **the same** as traditional interventions?
  - Patients are still generally seen for a regular duration (50 minute hours, 45 minute billing periods, for behavioral interventions, etc.)
  - Provision of intervention is still generally the same as with any other modality
    - Some specific modifications might be made, such as for exposure-and-response-prevention therapies for obsessive compulsive disorder
  - Regular assessments can still be completed
    - Most telehealth services have an option to push paperwork to patients, including regular assessments such as the PHQ-9
  - An emphasis is still placed upon patient rapport in combination with delivery of effective treatments
    - Just because the treatment is delivered via technology does not mean it has to or should be robotic or markedly different from traditional care

Telehealth Guidelines

- The American Psychological Association has developed guidelines for the delivery of telepsychology services (Joint Task Force for the Development of Telepsychology Guidelines for Psychologists (2013). Guidelines for the Practice of Telepsychology. American Psychologist, 68, 791-800)

Telehealth

- Competence
  - Obviously, practitioners must still practice within the boundaries of their competence when conducting telehealth interventions
  - Relevant training should be pursued (e.g., devoting a portion of one's required CE training to telehealth service training)
  - Consulting with a practitioner who already conducts telehealth services is a good idea
- Competence – Case Example
  - Dr. Smith has been treating anxiety disorders in his private practice for years, and has had a lot of success. So much so, that his reputation has spread around the state and he often gets calls from people in other cities wondering if they can see him

Telehealth

- He's just heard about telehealth and decides to give it a try for some of the interested patients in the state. He decides that because he's most well-trained in treating anxiety, he will continue to do that via telehealth. He sets up Facetime appointments with several new clients
- What has Dr. Smith done wrong?

- Competence – Case Example
  - Dr. Smith has rushed into an entirely new treatment modality without learning about it first
  - Like many people new to telehealth, Dr. Smith assumed that he could just do what he normally does in therapy, and use any communication service
  - It isn't apparent how he will plan to translate his work to telehealth
    - Anxiety treatment, for example, often involves exposure — how will he manage that via telehealth?

Telehealth

    - He does not seem to have any plans to attend CEs or otherwise learn about telehealth
  - His choice in communication software is not secure or compliant
  - He has no redundant systems in place (for example, if his mobile device breaks or service goes down)
  - He does not seem to have made any emergency contingency plans
- Competence
  - Emergency situations would require special attention
  - Before beginning telehealth services, psychologists should identify who is the relevant person to contact should an emergency arise

Telehealth

    - In a rural location, this may be one of only a few police officers nearby
    - If the telehealth practitioner is conducting services in another language and the patient is not fluent in English, the emergency responder identified must be able to communicate with the patient
- Competence – case example
    - Dr. Ling has been providing telehealth service to patients near the US-Mexico border in her state
    - She has completed CE sessions to prepare for this, including sessions on telehealth, working with Latinx immigrants to the U.S., immigration and acculturation, and other important and relevant topics
    - She was already fluent in Spanish but brushed up more to prepare. She now feels ready to take on the patients

Telehealth

    - She was already fluent in Spanish but brushed up more to prepare. She now feels ready to take on the patients
    - What has Dr. Ling not yet considered?
- Competence – case example
    - Dr. Ling has to set up emergency service contacts
    - In Dr. Ling's situation, there might be some additional concerns—many communities near the border are small, and access to emergency services might be very limited
    - If the only possible contacts for emergency services are police, there may be an additional challenge if the patient is undocumented, or if there are undocumented individuals living in the same home
    - Whatever emergency services are around—are they capable of speaking to any patients who may not speak English?

Telehealth

- Competence
  - The practitioner must identify when telehealth services are not viable and establish a discharge plan.
    - e.g., when a patient experiences recurrent, significant emergencies
  - Such patients should be referred for more appropriate care
  - Telehealth can be used to provide supervision and consultation, especially when supervisors knowledgeable in specific areas are not plentiful
  - Some subspecialties or certifications require on-site/in-person supervision and training, and telehealth cannot be used unless the rules for the certification, etc., allow it

Telehealth

- Standards of care in service delivery
  - The same ethical and professional standards apply in the delivery of telehealth services
  - Although patient preferences for telehealth services are a factor in providing telehealth services, it is not the only factor
  - Practitioners should not use telehealth services when it is not appropriate to do so (e.g., when the patient experiences frequent crises and in-person competent treatment is readily available), even if a client were to prefer it
  - Issues related to the environment in which the patient will use the services must be addressed
  - Example: Karen is the mother of a newborn, a three-year-old, and a five-year-old. Karen lives in a rural area underserved by mental health professionals. She is a stay-at-home mother and her partner, though supportive, works 8-6 every weekday

Telehealth

- Karen is experiencing moderate post-partum depression, and would like to obtain psychological services. However, her family situation makes the drive to the nearest mental health provider prohibitive
- What factors should be considered in working with Karen?
- What is Karen's level of risk for suicidal or homicidal behavior?
  - Even if it is low, emergency contacts need to be established for local resources
- Is Karen going to be distracted during sessions?
  - With three children, this seems likely
  - Can Karen have a babysitter or friend watch the children while Karen is using the telehealth services?

Telehealth

- Informed consent
  - The description and nature of the services needs to be clear to patients
  - Policies and procedures also need to be clear.
    - e.g., how are technology issues handled and rescheduled?
  - The informed consent processes may be different if the practitioner is working across jurisdictions
  - Providers need to be clear with patients how therapy and personal information is stored
  - Risks for data breaches need to be addressed
  - Billing and payment needs to be clearly addressed
    - The patient will not have a billing person to see when the session ends, as they might in a practice

Telehealth

- Confidentiality of data and information
  - All of the same general rules for practice still apply in telehealth services
  - We do want to specify a social media policy (e.g., that we will not look up patients online and will not accept friend requests from patients), though this is now pretty much standard across telehealth and in-person practice
- Security and transmissions of data and information
  - A reasonable effort must be made to ensure data security
  - This can often be handled well by using established telehealth provision services
- Disposal of data
  - Data disposal policies should be made clear to patients
    - e.g., videos of sessions should not be archived and kept indefinitely

Telehealth

- Practice across jurisdictions
  - Several agencies, such as the DoD and VA, have internal regulations about practice across states
  - Laws and rules that govern service delivery vary between states
    - Some certifications, such as PsyPACT, allow for practice across states
    - People who are boarded in psychology can often get licensed in a new state with reciprocity (i.e., the process for completing licensing is briefer, perhaps limited to forms and a jurisprudence exam)
  - Different mental health providers and different services may be covered by different laws and rules, across states and within states

U.S. Department of Defense (DoD)
U.S. Department of Veterans Affairs (VA)
Psychology Interjurisdictional Compact (PsyPACT)

Telehealth

- Nursing professional guidelines (from the ANA):
  - 13 Principles
    - Principle 1. The use of connected health technology does not alter professional practice guidelines for delivering care, doing research, or providing education
      - Care must still be consistent with the law, evidence-based, high quality, and personalized
    - Principle 2. Connected care is subject to the same guidelines and oversight as in-person care
    - Principle 3. Technology should improve access, and so meet patient needs, be practical to use, and align with patient location
    - Principle 4. Care has to meet state regulatory guidelines, and providers need to know how guidelines vary across states

American Nurses Association (ANA)

Telehealth

  - Principle 5. Providers are responsible for their own competency development in using telehealth
  - Principle 6. Telehealthcare must be consistent with in-person care, while recognizing limitations of telehealth
  - Principle 7. The integrity and value of the provider-patient relationship has to be established and maintained
  - Principle 8. Patient health information must be securely maintained
  - Principle 9. Documentation for telehealth has to be consistent with requirements applicable to in-person care
  - Principle 10. Patients must be informed about the process, risks and benefits, and rights and responsibilities in general as well as those unique to telehealth
  - Principle 11. Patient safety must be assured

Telehealth

- Principle 12. The profession must continue to research best practices for telehealth
- Principle 13. Reimbursement for care should reflect the modernization of care

https://www.nursingworld.org/~491792/globalassets/docs/ana/practice/connected-health-prinicples-and-code-of-ethics-2019.pdf

Telehealth

- An AMA study in 2018 indicated that:
  - 15% of physicians worked in clinics that used telehealth for direct patient interaction, such as diagnosis, treatment, follow up, or management of patients
  - 11% of physicians worked in practices that used telehealth for interactions with other providers, such as getting a second opinion
  - Radiologists (40%) and cardiologists (24%) were the specialties with highest use of telehealth for direct interactions
  - Emergency medicine (39%), pathologists (30%), and radiologists (26%) had the highest rates of use of telemedicine for interactions with other providers
  - Large medical practices more commonly used telehealth than smaller ones

American Medical Association (AMA)
https://www.ama-assn.org/press-center/press-releases/ama-offers-first-national-estimate-telemedicine-use-physicians

Telehealth

- Of course, use expanded during COVID-19
- The AMA's Telehealth Implementation Playbook (https://www.ama-assn.org/practice-management/digital/ama-telehealth-quick-guide) has recommendations for building telehealth into practices
  - These cover steps from forming a telehealth team, to picking a system, to designing workflow, to evaluating success
- Reviewing some practical considerations

Coronavirus disease of 2019 (COVID-19)

Telehealth Platforms

- One cannot simply use any videoconference software to conduct telehealth
- HIPAA guidelines specify that:
  - Only authorized users will have access to e-personal health information
  - The communication must be secure
  - Communications must be monitored to detect breaches
- **Unsecure** channels include, but are not limited to
  - Text message
  - Facetime™
  - Skype™
  - Email

But, many of these have HIPAA-compliant options

Health Insurance Portability and Accountability Act of 1996 (HIPAA)

Telehealth Platforms

- Most systems have specialized versions that are HIPAA-compliant, but the basic version of the service is not (e.g., basic Zoom is not HIPAA-compliant, but there is a HIPAA-compliant version)
- Most commercial services that are HIPAA-compliant charge subscription fees
  - Most now charge only the provider, and then either a set number of patients, or an unlimited number for other services, patients can download the software for free
  - Larger-scale providers (e.g., a group practice) can also obtain subscriptions for more than one provider or build an entire system for the practice

Telehealth Offices

- There are a large number of factors to keep in mind when designing a telehealth office
- Most of these are factors related to the provider, to provide a telehealth experience that is optimal for the patient
  - It really is not enough to just throw up a web cam and start seeing patients

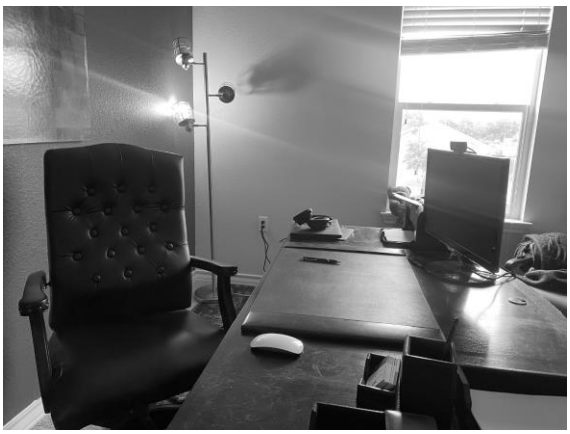


Image courtesy of Mike C. Parent, PhD

Telehealth Offices

1. Camera location
   - The camera should be located at a spot barely above the screen where the provider will be looking, and should provide a view of the provider's entire head, part of their upper body, and some of the office

Telehealth Offices

Image courtesy of Mike C. Parent, PhD

Telehealth Offices

- The camera should NOT be located too close to the provider's face, so that their face fills the entire screen for the patient

Telehealth Offices

Image courtesy of Mike C. Parent, PhD

Telehealth Offices

- The camera should NOT be located too high above the provider's head, as they will be seen by the patient as gazing downward

Telehealth Offices

Image courtesy of Mike C. Parent, PhD

Telehealth Offices

- Some laptop systems have the camera built in this low, which can look strange for a patient
  - (On top of being a pretty unflattering angle for most people)
- The camera should NOT be located too high above the provider's head, as they will be seen by the patient as gazing downward
- This can easily be perceived by patients as being uninterested or unengaged

Telehealth Offices

Image courtesy of Mike C. Parent, PhD

Telehealth Offices

- Some people use nice cameras on their own stand, but that are at an angle to the provider. Again, to a patient this looks like the provider is not looking at the patient and is not engaged

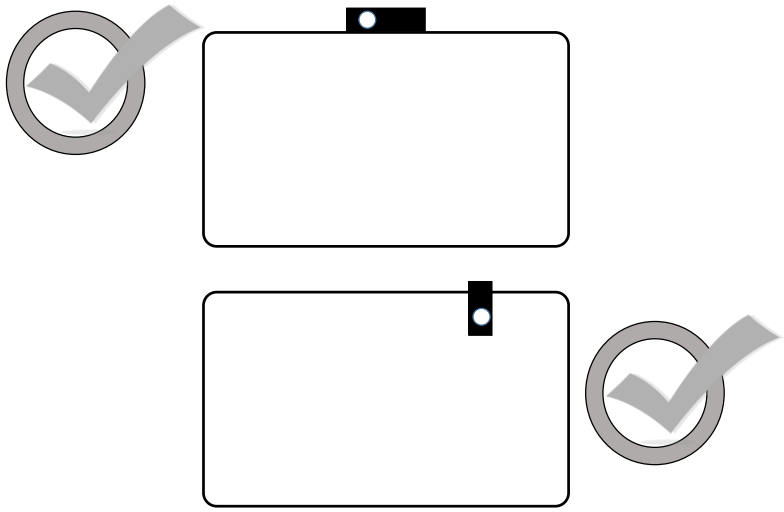
Telehealth Offices

Image courtesy of Mike C. Parent, PhD

Telehealth Offices

- The best camera location is on the screen where the patient appears, either as close as possible to the screen or even hanging down from the screen, as some webcams are built to do

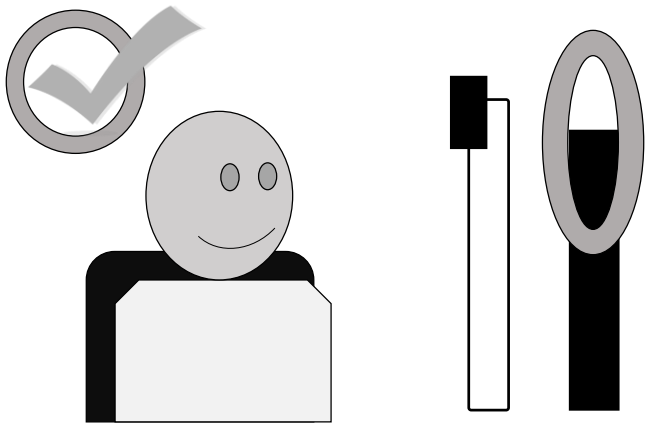
Telehealth Offices



Telehealth Offices

2. Lighting
   - Make sure there is a lighting source in front of you, so that your face is lit from the front
   - Retailers sell small, desktop lamps that emit soft light for video recording (typically called “ring lights”)

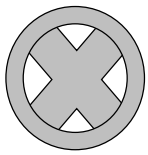
Telehealth Offices



Telehealth Offices

- Avoid having all the light in the room come from behind you. This can obscure your facial expression, and can even make a provider look threatening or ominous (this is how villains are lit in movies!)

Telehealth Offices



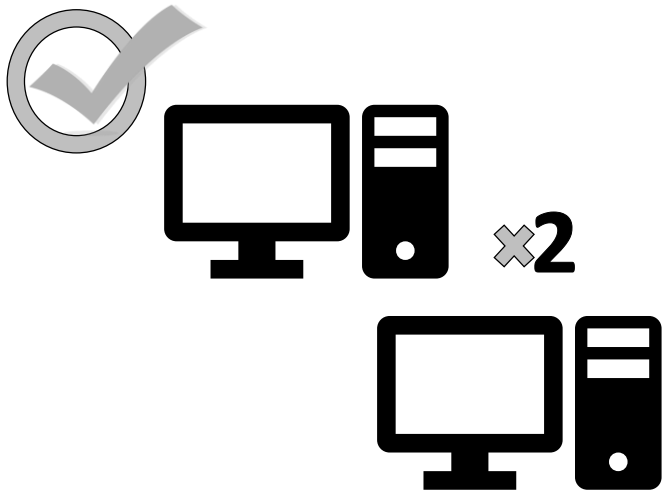
Back lighting +
Suspicious look +
Devil horns +
Evil laugh +
Sinister Mustache =
Villain!

Image courtesy of Mike C. Parent, PhD

Telehealth Offices

3. Redundant systems
   - It is a good idea to have a complete backup system available all the time, with all the same capabilities, software, patient information, etc., available
   - This prevents a delay for seeing patients if the main system encounters a problem, needs tech support, or even starts completing a mandatory system update just before a session

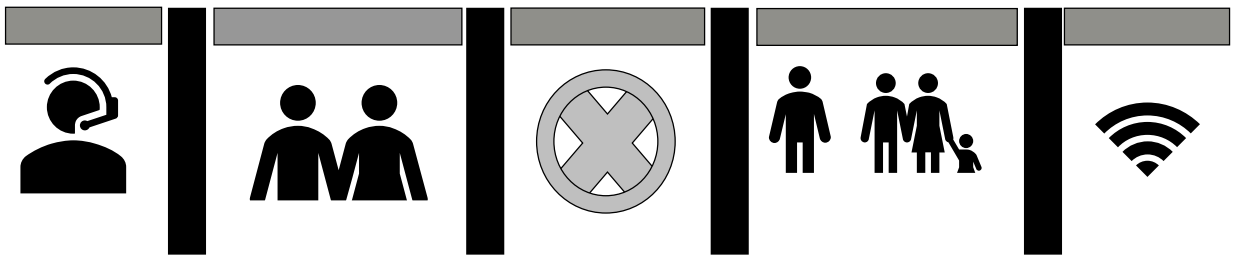
Telehealth Offices



Telehealth Offices

4. Audio
   - You need to ensure that your system has a better-than-average audio pickup system
   - Most computers come equipped with internal microphones that now provide acceptable audio quality
   - However, many external webcams also have better audio capabilities than internal microphones
   - Because you cannot control the audio output quality of the patient's computer or device, having the best possible option on your end can enhance patient experience
5. Net connectivity
   - If you have a telehealth office in a group practice office, locate the telehealth computer terminal in an office as close as possible to your office's internet router, or use a hard line (ethernet) cable plug in
   - Having to travel through even thin walls degrades a WIFI signal — not enough to notice when using email, but enough to slow down a video transmission notably

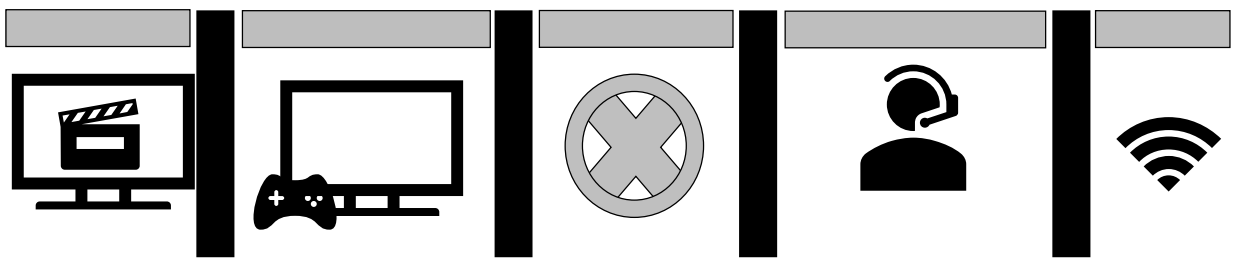
Telehealth Offices



Telehealth Offices

- If you are using a home office, remember the same rule — and that other devices that use a lot of internet bandwidth in the same house can slow down the video software used to conduct telehealth services, regardless of where they are in the home
- Most router systems actually have two options to connect — 2.4G and 5G
- 2.4 travels farther but is slower, 5G has shorter range but is faster

Telehealth Offices



Ethical Considerations

Ethical Considerations

- Many psychologists may not be fully aware of all issues surrounding technology and the Internet, which may lead to unintended ethical issues
  - For example, general ethical guidelines state that client information cannot be transferred to third parties without the client's permission
- But, sending emails involves the transfer of information to a third party (the internet service provider and the email host [the company that owns the email service, such as Hotmail® or a university])
  - Often, this can actually involve international transfer of information as servers for the email host may be located in another country!

Ethical Considerations – Email

- Email may be fast, but it has some problems:
  - It is easily transferred (simply by forwarding)
  - It is at risk for accidental transmission
    - The forwarding "oops" or errors in autocomplete
  - Email contains all information from the sender, so no health information is ever redacted
  - It can be accessed relatively easily by unintended users
    - e.g., pulling up a presentation via email in a class, leaving a computer unattended at a coffee shop
  - It is also subject to data mining
- Data mining
  - Have you ever sent an email about something, and then seen an ad for something related pop up the next day?

Ethical Considerations – Email

  - Most email companies offer you free email access in exchange for selling mined data from your email and Internet activity for targeted advertisements
  - The mining software is not supposed to retain any of the information, but it does scan it and identifies trends in emails and search histories
  - Case example: Dana and her partner have been considering adoption, as Dana has just discovered that she is unable to conceive a child
  - Dana has a busy work schedule, and her therapist, Dr. Jones, has been working with her intermittently via email for several weeks, including sending fairly detailed emails back and forth as though conducting sessions over email
  - Dana now finds that her Facebook account and other websites regularly display ads for fertility clinics, day cares, and children's toys. She sees these ads every time she goes online and has stopped using Facebook to connect with her friends in other states because of the constant stream of ads

Ethical Considerations – Email

  - Case example: this is entirely possible. By sending such emails, words such as *child, pregnancy, conceive, adoption, baby*, etc., could be picked up by data mining software and used in targeted ads
- Unauthorized access
  - Even inadvertent unauthorized access is possible
  - Some personal computer systems are meant to sync together, so that emails or text messages become instantly available after those two devices are told to "trust" one another
  - If someone uses a friend's or partner's computer, and connects another device (e.g., mobile phone), it is possible for information such as this to become synced, depending on the settings and capabilities of the phone and the computer
  - Mobile devices can also be lost or stolen, and a surprising number of people do not have a password on their mobile device (or, have one that is very easily guessed)

Ethical Considerations – Email

  - Many corporate email systems are also **not at all private**, and anyone from management to tech support may have partial or complete access to an employee's email contents
- Email is commonly used for scheduling purposes. A good informed consent document will specify that this is the only appropriate use of email to communicate with a provider
- Some paid telehealth services also provide some other functions, such as HIPAA-compliant messaging services, that can be used in leu of normal email

Ethical Considerations – Cloud Storage

- There is a saying in computer technology — "There is no cloud, there is only someone else's computer."
- Cloud storage involves use of an external storage system for data
  - For example, someone might store a manuscript on a cloud service, and access the same files from both work and home to continue working on the document
- Cloud storage is **not** a viable means of storing patient information, unless the cloud storage is expressly HIPAA-compliant
  - Cloud storage very often involves international transfer of data to back up servers in another country as well
  - It's typically impossible to know where specifically your cloud information is stored
  - Smart phones often automatically back up data to a cloud, often including emails

Is Telehealth Service Effective?

Psychological Services
2016, Vol. 13, No. 4, 373–379

1541-1559/16/$12.00 http://dx.doi.org/10.1037/ser0000106

Effectiveness of PTSD Telehealth Treatment in a VA Clinical Sample

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Is Telehealth Service Effective?

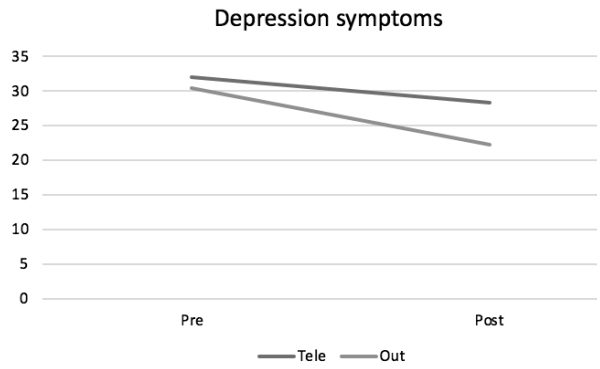
- 221 veteran participants who met criteria for PTSD and attended at least one session were used in the analysis
- Imminent suicidal/homicidal ideation, psychosis or mania, and severe substance use were used as rule-outs for inclusion
- The patients were able to choose either outpatient or telehealth treatment, using cognitive processing therapy and prolonged exposure
- 30 providers did the outpatient treatment, and three of those also did the telehealth treatment
- Data were collected from patients between October 2012 and March 2014
- 85 patients elected to use telehealth, and 136 elected to use outpatient treatment
- Patients who elected to use telehealth were more likely to be service-connected (meaning that they may have had injuries that made telehealth an easier option)

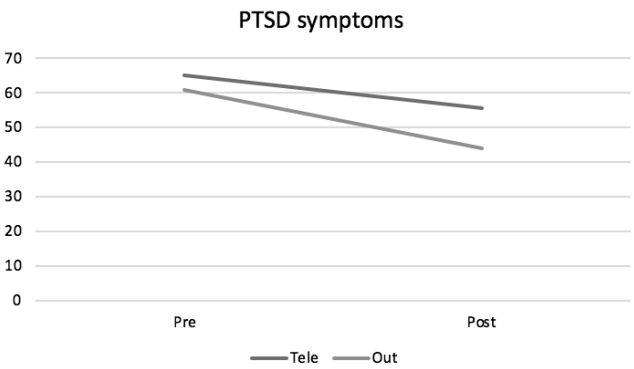
Is Telehealth Service Effective?

- Patients attended for an average of 7.3 telehealth sessions and 7.8 outpatient sessions
- PTSD and depression were measured as outcomes
- Those in the telehealth group started out with higher PTSD symptoms on average
  - Telehealth M = 65.08, SD = 1.25
  - Outpatient M = 60.67, SD = 0.94
- And about equal depression symptoms
  - Telehealth M = 32.11, SD = 1.39
  - Outpatient M = 30.47, SD = 0.98
- Both groups demonstrated improvements over time

Post-traumatic stress disorder (PTSD)
Mean of a sample (M)
Standard deviation (SD)

Is Telehealth Service Effective?





Is Telehealth Service Effective?

- The only predictors of improvements were time spent in telehealth or outpatient treatment. No other factors (age, service era, race/ethnicity, service connection) impacted improvements beyond time in treatment

What Do Providers Think of Telehealth Service?

Attitudes Toward Psychological Telehealth: Current and Future Clinical Psychologists' Opinions of Internet-Based Interventions

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DOI: 10.1002/jclp.21912

Attitudes Toward Psychological Telehealth: Current and Future Clinical Psychologists' Opinions of Internet-Based Interventions

- Recruited 717 participants, drawn from APA list serves and emails to training directors
- 308 doctoral students (65 men, 243 women), mean age of 27.7, 2.7 years of experience in therapy
- Most (71%) identified as CBT-oriented
- 409 licensed psychologists (242 men, 167 women), mean age 56.6, 28 years of experience on average
- Most (58%) CBT or dynamic (24%)
- Overall, 67% of the participants were accepting of telehealth services.
  - 69% of students and 67% of professionals

American Psychological Association (APA)
Cognitive behavioral therapy (CBT)

Attitudes Toward Psychological Telehealth: Current and Future Clinical Psychologists' Opinions of Internet-Based Interventions

- The highest acceptance rates were for GAD (70%), agoraphobia (64%), dysthymia (63%), social anxiety (63%), specific phobias (61%), major depression (56%), panic disorder (54%), and OCD (51%)
- Lower acceptance was reported for acute stress disorder (48%), PTSD (45%), substance use (44%), and gender identity disorder (38%)
- Low acceptance was reported for Bipolar II (28%) and bipolar I (28%), schizoaffective disorder (16%), and schizophrenia (16%)
- Only 24% of the sample reported that they thought telehealth would be as effective as in-person therapy in the future

Generalized anxiety disorder (GAD)
Obsessive-compulsive disorder (OCD)

Attitudes Toward Psychological Telehealth: Current and Future Clinical Psychologists' Opinions of Internet-Based Interventions

- CBT was the most widely accepted style to deliver online (79%), along with cognitive therapy (78%), behavior therapy (73%), parent training (70%), and motivational interviewing (63%)
- Lower acceptance found for supportive therapy (29%), existential therapy (28%), systems therapy (28%), psychodynamic (25%), and reality testing (10%)
- Individual therapy was the most accepted (92%), then couples (45%), family (33%), and group (27%)
- Acceptance was highest for providing services to young adults (85%), middle aged adults (78%), adolescents (73%), older adults (46%), and children (44%)
- Acceptance of the possibility of both adjunctive (72%) and stand-alone (71%) interventions was high, and did not differ much between students and professionals

Attitudes Toward Psychological Telehealth: Current and Future Clinical Psychologists' Opinions of Internet-Based Interventions

- Concerns about telehealth were focused on a lack of research on its efficacy (63%), crisis management (58%), confidentiality concerns (47%), general ethical concerns (45%), privacy concerns (46%), license issues (29%), and billing processes (19%); but 32% said they had no concerns
- Only 21% said they thought they could competently provide telehealth services, but 75% said they might be interested if they completed additional training on telehealth service

What Do Patients Think of Telehealth Service?

Attitudes Toward Telemedicine in Urban, Rural, and Highly Rural Communities

Vaughn R.A. Call, PhD,[1] Lance D. Erickson, PhD,[1] Nancy K. Dailey, MSN, RN,[2] Bret L. Hicken, PhD, MSPH,[2] Randall Rupper, MD,[2,4] Jeremy B. Yorgason, PhD,[3] and Byron Bair, MD, MBA[2]

[1]Department of Sociology, Brigham Young University, Provo, Utah.
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The views expressed herein do not necessarily represent the views of the Veterans Administration or the U.S. government.

- Published in Telemedicine and E-health, 2014

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- Published in Telemedicine and E-health, 2014
- People who use telehealth tend to like it, and people tend to like it more as they use it more
- But, some people may not ever want to try it, and may prefer no treatment to telehealth — so, they may never have a chance to try it
- Data for this study were collected from Montana, a state with both metropolitan and highly rural areas
- These data are from a follow-up study using a state data set of 2659 individuals
  - 355 urban, 1042 rural, and 1262 highly rural (less than 7 per square mile)

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- Telehealth attitudes were assessed using 8 items

Latent class analysis was used to identify four groups:

1. Averse (strongly prefer to see a doctor in person and believe that care is better in person)
2. Amenable (low preference for in-person visits)
3. Situationally comfortable (seeing telehealth as especially useful to avoid travelling, etc.)
4. Situationally uncomfortable (preferring in-person visit, but recognizing that telehealth can be pragmatic due to weather or travel)

- The researchers compared the four groups on variables in the data set

What Do Patients Think of Telehealth Service?

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- The researchers compared the four groups on variables in the data set
  - Amenable participants tended to be slightly lower income
  - Averse participants were slightly lower in education
  - Amenable people tended to have fewer regular doctor's visits
  - Situationally comfortable and situationally uncomfortable people were much more likely to be rural or highly rural

What Do Patients Think of Telehealth Service?

- The averse group also tended to not use the internet for many other things, and had lower rates of internet use than the other groups for using the internet to get news, get health information, watch movies, etc.

What Do Patients Think of Telehealth Service?

BMJ Open

Telehealth and patient satisfaction: a systematic review and narrative analysis

Clemens Scott Kruse, Nicole Krowski, Blanca Rodriguez, Lan Tran, Jackeline Vela, Matthew Brooks

What Do Patients Think of Telehealth Service?

- The authors reviewed studies on telemedicine that included patient satisfaction with the service as one outcome
- Papers were eligible for inclusion if they were published between 2010 and 2017, in English, the full text was available, and the study involved human participants
- Forty-four studies were identified in total
- Patients reported that telehealth service improved outcomes (likely due to increased access to care), that it was their preferred modality of treatment, that it was easy to use, that it cost less than traditional health service, that communication was easier, that travel time was reduced, and that self-management of health conditions was improved via telehealth

AIDS PATIENT CARE and STDs
Volume 34, Number 4, 2020

DOI: 10.1089/apc.2019.0261

Exploring the Attitude of Patients with HIV About Using Telehealth for HIV Care

Dima Dandachi, MD,[1–3] Bich N. Dang, MD,[3–5] Brandon Lucari, BS,[6] Michelle Teti, DrPH, MPH,[7] and Thomas P. Giordano, MD, MPH[3–5]

Human immunodeficiency virus (HIV)

AIDS PATIENT CARE and STDs
Volume 34, Number 4, 2020
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Exploring the Attitude of Patients with HIV About Using Telehealth for HIV Care

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- Loss to follow up for people living with HIV increases when patients face barriers such as transportation costs, travel distance, and unreliable public transportation
- 371 HIV+ patients were recruited
- Participants' median age was 51, 36% of the sample identified as female, and the sample was 63% African American and 26% Hispanic
- Just over half (57%) of the participants reported that they would use telehealth for HIV care; 37% said they would want to

Exploring the Attitude of Patients with HIV About Using Telehealth for HIV Care

- Primary benefits identified by the participants were
  1. Better fit to the patient's schedule
  2. Not needing to travel to the clinic
  3. More privacy at home
- Telehealth interest was higher among US-born, MSM, college degree-holding participants
- Telehealth interest was low for those who had been living with HIV for more than 10 years and those who did not own or were not familiar with personal computers

Men who have sex with men (MSM)

…AND AFTER COVID-19?

Mental Health Care Providers' Attitudes Toward Telepsychiatry: A Systemwide, Multisite Survey During the COVID-19 Pandemic

Daniel Guinart, M.D., Patricia Marcy, B.S.N., Marta Hauser, Ph.D., Michael Dwyer, M.A., John M. Kane, M.D.

- Published in Psychiatric Services, 2021
- Data were collected from clinicians in 19 hospitals; 819 surveys were returned
- Most clinicians worked in adult outpatient (56%) or child and adolescent clinics (18%)
- 73% who used video conference software said the experience was good or excellent
- 66% for those who used phone only
-

…AND AFTER COVID-19?

Mental Health Care Providers' Attitudes Toward Telepsychiatry: A Systemwide, Multisite Survey During the COVID-19 Pandemic

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- Challenges were:
  - Patients who could not use the software (52%)
  - Low sense of connection (46%)
  - Technical problems (39%)
  - Providers 55 and older reported no difficulty using the telehealth software
- Identified advantages were:
  - Ease in rescheduling (77%)
  - Better timing for the appointment start time (69%)
  - No or reduced no-shows (52%)

…AND AFTER COVID-19?

Mental Health Care Providers' Attitudes Toward Telepsychiatry: A Systemwide, Multisite Survey During the COVID-19 Pandemic

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- Providers identified that psychotic disorders were the worst match for telehealth and anxiety disorders were the best match
- 34% said that after COVID-19 they will still use telehealth for more than half their caseload, 30% more said for 25%-50% of their caseload
- Providers reported that having patients who did not have video devices resulted in resorting to using the phone, which was rated as not desirable

…AND AFTER COVID-19?

Musculoskeletal Science and Practice
Volume 52, April 2021, 102340

Original article

'It's not hands-on therapy, so it's very limited': Telehealth use and views among allied health clinicians during the coronavirus pandemic ☆

P. Malliaras [a], M. Merolli [b, c], C.M. Williams [a], J.P. Caneiro [d], T. Haines [e], C. Barton [f, g]

…AND AFTER COVID-19?
'It's not hands-on therapy, so it's very limited': Telehealth use and views among allied health clinicians during the coronavirus pandemic ☆
P. Malliaras [a], M. Merolli [b, c], C.M. Williams [a], J.P. Caneiro [d], T. Haines [e], C. Barton [f, g]

- Data were collected from 827 allied health clinicians, mostly from Australia (60%) and Europe (27%)
  - Non-medically-trained health professionals who worked with musculoskeletal conditions
  - Most (82%) were physiotherapists
- Data were collected on use of telehealth
- 71% of participants reported loss of revenue since COVID-19
  - 23% said it was not relevant (i.e., worked for state-funded hospitals)
  - The mean reduction was reported to be 62%
- Most (66%) of clinicians did not use telehealth at all before COVID-19
  - The median increased from 0% to 60% during the pandemic

...AND AFTER COVID-19?

'It's not hands-on therapy, so it's very limited': Telehealth use and views among allied health clinicians during the coronavirus pandemic ☆

P. Malliaras [a] ✉, M. Merolli [b, c], C.M. Williams [a], J.P. Caneiro [d], T. Haines [e], C. Barton [f, g]

- For assessment, 100% used subjective questions and 86% used functional tests (e.g., range of motion)
- Interventions over telehealth included instructions and links to websites and videos
- Clinicians said a telehealth visit was about the same length as in person (43%), shorter (30%), or longer (26%)
- Only 3% said they would not want to use telehealth at all
- Most clinicians reported that their knowledge of telehealth came from colleagues, professional associations, and social media
- Clinicians felt telehealth was important to use and they felt confident using it, and also reported that they did not get much training, that there were limitations to the effectiveness of telehealth, and patients valued telehealth sessions less

...AND AFTER COVID-19?

'It's not hands-on therapy, so it's very limited': Telehealth use and views among allied health clinicians during the coronavirus pandemic ☆

P. Malliaras [a] ✉, M. Merolli [b, c], C.M. Williams [a], J.P. Caneiro [d], T. Haines [e], C. Barton [f, g]

- Related to this profession, clinicians saw inability to touch the patient to help guide them through movements as one of the biggest limitations

…AND AFTER COVID-19?

Clinician Satisfaction with Rapid Adoption and Implementation of Telehealth Services During the COVID-19 Pandemic

Melanie T. Gentry, MD,[1] Ajeng J. Puspitasari, PhD,[1] Alastair J. McKean, MD,[1] Mark D. Williams, MD,[1] Scott Breitinger, MD,[1,2] Jennifer R. Geske, MS,[3] Matthew M. Clark, PhD,[1] Katherine M. Moore, MD,[1] Mark A. Frye, MD,[1] and Donald M. Hilty, MD, MBA[4,5]

Conclusion: *This study demonstrates the ability of mental health clinicians to embrace new technology to expand access to care during the COVID-19 pandemic. Results indicate that telemental health is likely to be an integral part of clinic practice in the future.*

- Published in Telemedicine and e-Health, 2021

…AND AFTER COVID-19?

Clinician Satisfaction with Rapid Adoption and Implementation of Telehealth Services During the COVID-19 Pandemic

- Data were collected from over 100 mental health providers between March and June 2020 from two Mayo Clinic clinics in Minnesota
- Most providers were faculty psychiatrists (33%), faculty neuropsychologists or psychologists (16%), licensed drug counselors or professional counselors (15%), and psychiatry residents (13%)
- Ratings of acceptability of telehealth were not related to years in practice or age
- 55% had a preference for continuing to do mostly telehealth after COVID-19

…AND AFTER COVID-19?

Patient Satisfaction with Telehealth During COVID-19:
Experience in a Rural County on the United States–Mexico Border

Rachael Phenicie, BA,[1] Rosemary Acosta Wright, MPH,[2] and Jeffrey Holzberg, MD, MSc, FAAP[2,i]

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- Also published in Telemedicine and e-Health

…AND AFTER COVID-19?

Patient Satisfaction with Telehealth During COVID-19:
Experience in a Rural County on the United States–Mexico Border

- Data were collected in Cochise county, in southeast Arizona near the US-Mexico border
- Data were collected from 562 people in the region who completed telehealth visits
- Most participants (60%) rated telehealth sessions as just as good as in person, but 30% said they were worse
- Satisfaction was high (very or somewhat) among 87% of the sample
- 23% of the sample preferred telehealth and 42% preferred in person; 31% had no preference for either
- Age was the best predictor of lower preference for telehealth
- Distance to a clinic, ease of scheduling over telehealth, and feeling safer than while travelling to the clinic were the strongest predictors of preference for telehealth

…AND AFTER COVID-19?

ELSEVIER

Heart & Lung
Volume 50, Issue 5, September–October 2021, Pages 675-684

Perceptions of patients with chronic obstructive pulmonary disease towards telemedicine: A qualitative systematic review

Wenshuo Li MSN [a, 1], Wei Liu RN [b, 1], Shengnan Liu MSN [a], Jing Li MSN [a], Wenjing Wang [a], Kun Li PhD, RN, Professor [a]

…AND AFTER COVID-19?

Perceptions of patients with chronic obstructive pulmonary disease towards telemedicine: A qualitative systematic review

- 20 manuscripts were found for the review, focused on COPD patients
- Mostly from the UK and Denmark

…AND AFTER COVID-19?

Perceptions of patients with chronic obstructive pulmonary disease towards telemedicine: A qualitative systematic review

Themes identified were:

- Ease of use
  - Systems were easy use and intuitive for those who had not used them before
  - Telehealth made access to health services easier
- Usefulness
  - Self-management of conditions was enhanced
  - Telehealth improved or supplemented standard care
  - Patients felt more security and encouraged to be more independent
  - Relationships with health providers were strengthened
  - Telehealth could facilitate faster, earlier visits leading to earlier detection of problems
  - Attitudes toward exercise improved

…AND AFTER COVID-19?

Perceptions of patients with chronic obstructive pulmonary disease towards telemedicine: A qualitative systematic review

- Difficulty of use
  - Patients were worried about using telehealth, especially when they were not familiar with computers
  - Some problems with data collection from devices occurred
- Perceived uselessness
  - Additional burden from more frequent provider contact, for the patient
  - Lack of face-to-face contact
  - Increased anxiety and insecurity due to increasing attention on their own conditions

…AND AFTER COVID-19?

Perceptions of patients with chronic obstructive pulmonary disease towards telemedicine: A qualitative systematic review

- Some patients simply did not want to do telehealth

…AND AFTER COVID-19?

Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration, 2021; 0: 1–5

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Check for updates

RESEARCH ARTICLE

The patient's perspective of remote respiratory assessments during the COVID-19 pandemic

RACHEL TATTERSALL[1,2], SIMON CARTY[2,3], DARA MELDRUM[2], ORLA HARDIMAN[2,4] AND DEIRDRE MURRAY[1,2]

[1]Department of Physiotherapy, Beaumont Hospital, Dublin, Ireland, [2]Academic Unit of Neurology, Trinity College Dublin, Dublin, Ireland, [3]School of Medicine, Royal College of Surgeons, Dublin, Ireland, and [4]Department of Neurology, Beaumont Hospital, Dublin, Ireland

…AND AFTER COVID-19?

The patient's perspective of remote respiratory assessments during the COVID-19 pandemic

- Data were collected from patients who required respiratory assessment
- Remote assessments (forced vital capacity and peak cough flow) were conducted via telehealth and using devices
- A clinician guided the patient through setting up the device
- Data were obtained from 25 patients who completed surveys
  - Mean age was 65.2, average time since diagnosis was 17.04 months, commute time to the clinic pre-COVID was a mean of 109 minutes. 72% of participants had help in setting up the tests, from a caregiver
- 92% of patients were satisfied and were ok with continuing sessions via telehealth
- Patients most valued reducing travel time to the clinic (92%) and reducing risk for exposure to COVID-19 (96%)
- Patients also valued appointments being at better times (80%)

…AND AFTER COVID-19?

The patient's perspective of remote respiratory assessments during the COVID-19 pandemic

- Patients were fine with the software; 76% disagreed with the statement that the software was unnecessarily complex, 92% found it easy to use. 68% did say they would need another person to help, but 88% said they could do it themselves if needed (some overlap between those two items)
- Patients also found the equipment (a mini spirometer) not too complex (76%) and easy to use (84%). Only 24% thought they would need help using it
- Patients also valued:
  - Easy and reliable calls
  - Picking better appointment times
  - Many reminders for the meeting
  - Not disturbing family members for a ride to the clinic

…AND AFTER COVID-19?

The patient's perspective of remote respiratory assessments during the COVID-19 pandemic

- Few patients had technical problems, and sessions resolved many other concerns with clinic visits (including ones not determined by COVID-19, such as having to get a ride to the clinic). Among this sample, there were some difficulties with mobility that were helped with having a caregiver assist with the assessment

LEARNING GOALS

1. Recall standards of care for the provision of telehealth services
2. Summarize relevant research on the use and effectiveness of telehealth
3. Summarize a set-up plan for the provision of effective telehealth interventions

Thank You for Viewing Telehealth for Healthcare Providers

Presented by:
Mike C. Parent, PhD

Health.edu
at Texas Tech University Health Sciences Center®

Telehealth for Healthcare Providers
Mike C. Parent, PhD