

COLORADO DAYLIGHT Partnership

TECHNOLOGY CHECKLIST FOR PROVIDING TBH SERVICES

Technology	Notes
ORIENTATION & TRAINING OF STAFF	
<input type="checkbox"/> Protocol 4: Do you have at least one technology staff person on site at the originating and far sites during any TBH session? Is this person must be trained to respond to technical problems that can occur during a TBH session? ¹	
CONFIDENTIALITY & PRIVACY	
<input type="checkbox"/> Protocol 10: Do you ensure all TBH equipment in rooms where clients may be present for TBH or face-to-face sessions or meetings are either turned off or covered with a lens cover when not in use to ensure privacy of non-TBH sessions? ²	
CONDUCT OF THE TBH SESSION	
<input type="checkbox"/> Protocol 18: Do you ensure that the picture-in-picture feature at the client's site is turned off unless the TBH provider specifically requests that it be turned on for a particular client? If a second monitor is present at the client site, do you ensure it is turned off during clinical sessions so that only the TBH provider is seen onscreen? ³	
TECHNICAL QUALITY OF TBH	
<input type="checkbox"/> Protocol 43: Do you assess all TBH connections and equipment for quality of video and audio signal prior to being used to provide services? ⁴	
<input type="checkbox"/> Protocol 44: Do you regularly monitor connections to ensure quality, appropriate bandwidth, and appropriate security? ⁵	
<input type="checkbox"/> Protocol 45: Do you have policies and procedures in place to ensure the physical security of TBH equipment and the electronic security of data? ⁶	
<input type="checkbox"/> Protocol 46: Do you have appropriate redundant systems and appropriate recovery procedures in place to ensure availability of the network for critical connectivity? ⁷	
<input type="checkbox"/> Protocol 47: Do you ensure compliance with all relevant safety laws, regulations, and codes for technology and technical safety? ⁸	
<input type="checkbox"/> Protocol 48: Do you have infection control policies and procedures in place for the use of TBH equipment and client peripherals? ⁹	
EQUIPMENT NEEDS	
<input type="checkbox"/> Protocol 49: Can you provide all services at a minimum bandwidth of 1500 kbps?	
<input type="checkbox"/> Protocol 50: Do you use equipment that has features allowing for changing video clarity (e.g. brightness and contrast) and audio quality (microphone	

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and speaker volumes)?	
<input type="checkbox"/> Protocol 51: Do you use cameras on the client-end that are high quality?	
<input type="checkbox"/> Protocol 52: Do you ensure the resolution of the display monitor matches, as closely as possible, the resolution of the acquired image being displayed?	
<input type="checkbox"/> Protocol 53: Do you use equipment that can be controlled by the provider on the far-site to pan, tilt, and zoom the camera?	
<input type="checkbox"/> Protocol 54: Do you use equipment that allows for videos to be played so that people at other locations can see and hear them, record meetings when clinically appropriate and, with client permission, and share information on common white board or via computer files?	
<input type="checkbox"/> Protocol 55: Do you use equipment that allows for on screen message to notify user of such conditions as loss of far-site video, incomplete or dropped connections, mute/unmute, etc?	
<input type="checkbox"/> Protocol 56: Do you minimize the gaze angle (the angle between the participant’s local camera and where the participant looks at the distant onscreen participant) to increase perception of having direct eye contact?	
Equipment Needs for Confidentiality & Privacy	
<input type="checkbox"/> Protocol 57: Do you ensure all TBH endpoint equipment is password protected? ¹⁰	
<input type="checkbox"/> Protocol 58: Do you ensure all TBH endpoint equipment is set to “auto answer mute” and “auto answer multipoint: do not disturb” so that clinical TBH sessions cannot be accidentally interrupted, including by a second video connection? ¹¹	
<input type="checkbox"/> Protocol 59: Do you ensure all client services via TBH using the commodity internet use AES encryption or Virtual Private Networks to ensure the transmission is secure? ¹²	
Prioritization of Clinical TBH	
<input type="checkbox"/> Protocol 64: Do you ensure clinical TBH sessions take priority over all other types of videoconferences (administrative, training, etc)? Do you bump non-clinical videoconferences when necessary to accommodate clinical videoconferences? ¹³	
SPECIAL POPULATIONS	
Deaf and Hard of Hearing	
<input type="checkbox"/> Protocol 77: Do you provide TBH services with deaf clients in rooms with a visual signaling system for doors? ¹⁴	
<input type="checkbox"/> Protocol 78: Are you prepared to use additional technology to improve visual quality of the TBH session when clients use sign language as their primary	

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language, including high bandwidth, high resolution, larger screen size, and cameras and camera angles that show both the provider and client from the chest up? ¹⁵	
<input type="checkbox"/> Protocol 80: Are you prepared to use additional technology when either the client or provider is hard of hearing, including high bandwidth, hearing assistive technology, and equipment that has audio at 7 kHz full duplex with echo cancellation and easy to use volume adjustment? ¹⁶	
<input type="checkbox"/> Protocol 81: Do you use high quality microphones and assess microphone placement and room acoustics prior to use in sessions? Do you utilize any recommended means for improving room acoustics such as carpeting, soft furniture, acoustical treatments, or other sound absorbing characteristics? ¹⁷	
Geriatric	
<input type="checkbox"/> Protocol 82: Are you prepared to use additional technology to help with visual and auditory impairment including large monitors, high bandwidth, and high resolution? ¹⁸	
Children	
<input type="checkbox"/> Protocol 86: Do you ensure remote camera control is available to allow the provider to view and observe children as they move about the room? ¹⁹	

RESOURCES

- Center for Systems Integration (2010). *Standards of care for serving deaf and hard of hearing clients*. Denver, CO: Daylight Partnership, Mental Health Center of Denver, and Colorado Commission for the Deaf and Hard of Hearing.
- Yellowlees, Peter, Jay Shore, and Lisa Roberts (2009). *Practice Guidelines for Videoconferencing-Based Telemental Health*. American Telemedicine Association.
- Belz, Norbert, Leslie Bennet, Lisa Carnahan, Veronica Decker, Brian Grady, et al. (2009). *Evidence-Based Practices for Telemental Health*. American Telemedicine Association.
- (year unknown). *Maryland Telemental Health, Kent County Protocols*. Part of the telemental health site developed by Dr. Brian Grady, Co-Chair of the American Telemedicine Association's Telemental Health Standards and Guidelines Working Group. <http://www.telementalhealth.info/>
- Northern Arizona Regional Behavioral Health Authority. (Revised 2010). *Clinical Telemedicine Services, Provider Manual*. Arizona Department of Health Services, Division of Behavioral Health Services.

ENDNOTES

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- ¹ Developed in response to feedback from the Mental Health Center of Denver
- ² From the Northern Arizona Regional Behavioral Health Authority protocol.
- ³ Adapted from the Northern Arizona Regional Behavioral Health Authority protocol.
- ⁴ Loosely adapted from the Northern Arizona Regional Behavioral Health Authority protocol. Arizona has a formal process in place for assessing quality of connection and equipment. Updated to match ATA's Practice Guidelines for Videoconferencing-Based Telemental Health's language.
- ⁵ Loosely adapted from the Northern Arizona Regional Behavioral Health Authority protocol. Again, their system is more formally designed and so their guidelines are more specific. Updated to match ATA's Practice Guidelines for Videoconferencing-Based Telemental Health's language.
- ⁶ Adapted from ATA's Practice Guidelines for Videoconferencing-Based Telemental Health, p. 19
- ⁷ Adapted from Guidelines, p. 19
- ⁸ Verbatim from the ATA's Practice Guidelines for Videoconferencing-Based Telemental Health, p. 19
- ⁹ Verbatim from the ATA's Practice Guidelines for Videoconferencing-Based Telemental Health, p. 19
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- ¹⁰ From the Northern Arizona Regional Behavioral Health Authority protocol.
- ¹¹ From the Northern Arizona Regional Behavioral Health Authority protocol.
- ¹² From the Northern Arizona Regional Behavioral Health Authority protocol.
- ¹³ From Northern Arizona Regional Behavioral Health Authority protocol.
- ¹⁴ From the Daylight Standards of Care.

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- ¹⁵ Adapted from ATA's Evidence-Based Practices for Telemental Health, p. 9 and ATA's Practice Guidelines for Videoconferencing-Based Telemental Health, p. 15 reference to geriatric with discussion on auditory impairment.
- ¹⁶ Adapted from ATA's Evidence-Based Practices for Telemental Health, p. 9 and ATA's Practice Guidelines for Videoconferencing-Based Telemental Health, p. 15-16 reference to geriatric with discussion on auditory impairment.
- ¹⁷ Adapted from the ATA's Practice Guidelines for Videoconferencing-Based Telemental Health, p. 17, related to the quality of equipment.
- ¹⁸ Adapted from ATA's Evidence-Based Practices for Telemental Health, p. 9 and ATA's Practice Guidelines for Videoconferencing-Based Telemental Health, p. 15
- ¹⁹ Adapted from the ATA's Evidence-Based Practices for Telemental Health, p. 16 - 18 and the ATA's Practice Guidelines for Videoconferencing-Based Telemental Health, p. 15