# Telepractice and the DASH and DASH 17+

The telepractice information in this document is intended to support professionals in making informed, well-reasoned decisions around remote assessment. This information is not intended to be comprehensive regarding all considerations for assessment via telepractice. It should not be interpreted as a requirement or recommendation to conduct assessment via telepractice.

Professionals should remain mindful to:

- Follow professional best practice recommendations and respective ethical codes

- Follow telepractice regulations and legal requirements from federal, state and local authorities, licensing boards, professional liability insurance providers, and payors

- Develop competence with assessment via telepractice through activities such as practicing, studying, consulting with other professionals, and engaging in professional development.

Professionals should use their clinical judgment to determine if assessment via telepractice is appropriate for a particular examinee, referral question, and situation. There are circumstances where assessment via telepractice is not feasible and/or is contraindicated. Documentation of all considerations, procedures, and conclusions remains a professional responsibility.

Several professional organizations and experts have provided guidance on telepractice assessment (American Occupational Therapy Association [AOTA], 2020; American Psychological Association Services [APA Services], 2020; Association of State and Provincial Psychology Boards [ASPPB], 2013; Cason et al., 2018; Grosch et al., 2011; Inter Organizational Practice Committee [IOPC], 2020; Stolwyk et al., 2020) to assist professionals in decision making and ethical and legal practice issues.

A spectrum of options is available for administering this assessment via telepractice; however, it is important to consider the fact that the normative data were collected via an in-person assessment. Telepractice is a deviation from the standardized administration, and the methods and approaches to administering it via telepractice should be supported by research and practice guidelines when appropriate.

The DASH and DASH 17+ each consist of four handwriting tasks and one optional graphic speed task, which is scored separately. When in-person assessment is not possible, the graphic speed subtest potentially can be used for providing standardized information about fine motor skills in the absence of other fine motor tests suitable for telepractice.

Various options are available for administering the DASH and DASH 17+ via telepractice. They vary based on the role of the on-site facilitator. If the on-site facilitator is a well-trained professional, telepractice can involve all forms. In times when using a professional facilitator may not be feasible (such as the COVID-19 pandemic), it may be possible that the examinee participates with the help of a nonprofessional on-site facilitator in the examinee's home or other location (e.g., a parent, guardian, caretaker). If using an on-site facilitator who is not in a professional role (e.g., parent/guardian), they can assist with technological and administrative tasks during testing and should be oriented to these responsibilities in an initial virtual meeting and again at the beginning of the session. The initial virtual meeting should occur in advance of the testing session to address numerous issues specific to testing via telepractice. This initial virtual meeting is described in the administrative and technological tasks portion of the Examiner Considerations section and referred to in various sections of this document. The examiner should use their professional judgment about the capacity of the facilitator to perform the required functions correctly and without interfering in the testing session. The facilitator's role should be defined clearly by the examiner. The facilitator should only perform those functions the examiner approves and deems necessary. This document provides information about the role of the trained facilitator in telepractice assessment.

Both the DASH and DASH 17+ can be administered as a group test or as an individual administration. The DASH and DASH 17+ manuals provide additional guidelines in Chapter 2 for individual and group administration detailing considerations for setting up the environment, developing rapport, and managing timing of the tasks. When administering via telepractice, use the manual to determine whether the group administration directions or individual administration directions are the most appropriate for your scenario.

For telepractice, the assessment tasks must be completed with the examinee via teleconferencing, with the examiner using the DASH or DASH 17+ manual to follow the administration directions in Chapter 2. The DASH and DASH 17+ manuals are available in digital form in the Q-global Resource Library if a hard copy is not available.

# Conducting Telepractice Assessment

Conducting a valid assessment in a telepractice service delivery model requires an understanding of the interplay of a number of complex issues. In addition to the general information on Pearson's telepractice page, examiners should address five factors (Eichstadt et al., 2013) when planning to administer and score assessments via telepractice:

1. Telepractice Environment & Equipment

2. Assessment Materials & Procedures

3. Examinee Considerations

4. Examiner Considerations

5. Other Considerations

# 1. Telepractice Environment & Equipment

## Computers and Connectivity

Two computers with audio and video capability and stable internet connectivity—one for the examiner and one for the examinee—are required. A web camera, microphone, and speakers or headphones are required for both the examiner and the examinee. A second computer screen or split-screen format on a large computer monitor for the examiner is helpful to allow a view of a Pearson-delivered digital manual or administration directions, but the examiner can also use the paper format manual or administration directions. The second computer screen or large screen also tends to make sharing test content more straightforward for the examiner.

## Image/Screen Size

When items with visual stimuli are presented, the digital image of the visual stimuli on the examinee's screen should be at least 9.7" measured diagonally, similar to an iPad® or iPad Air®. Some teleconferencing software shrink the size of images, the image size should be verified in the initial virtual meeting. It is recommended that computer screens used for teleconference assessment be at least 15" measured diagonally. Smaller screens, such as those of iPad minis, small tablet PCs, and smartphones, are not allowed for examinee-facing content, as these have not been examined empirically and may affect stimulus presentation, examinee response, and validity of the test results. Similarly, presenting stimuli on extremely large screens has not been examined, so the same precaution applies. At the beginning of the testing session, the examiner may ask for a peripheral camera or device (as described later in this section) to be aimed at the examinee's screen to ensure that the examinee's screen is displaying images in the correct aspect ratio and not stretching or obscuring the stimuli image.

## Audio Considerations

High-quality audio capabilities are required during the administration. An over the head, two-ear, stereo headset with attached boom microphone is recommended for both the examiner and examinee. Headphones with a microphone may be used if a headset is not available.

The examiner should test the audio for both the examiner and examinee in the initial virtual meeting and at the beginning of the testing session to ensure a high-quality audio environment is present. Testing the audio should include an informal conversation prior to the administration where the examiner is listening for any clicks, pops, or breaks in the audio signal that distorts or interrupts the voice of the examinee. The examiner should also ask if there are any interruptions or distortions in the audio signal on the examinee's end. Any connectivity lapses, distractions, or intrusions that occurred during testing should be reported.

## Audiovisual Distractions

As with any testing session, the examiner should do everything possible to make sure the examinee's environment is free from audio and visual distractions. If the examiner is unfamiliar with the examinee's planned physical location, a visual tour of the intended testing room should be given

during the initial virtual meeting. The examiner can then provide a list of issues to address to transform the environment into one suitable for testing. For example, remove distracting items, silence all electronics, and close doors. The examiner should confirm that these issues have been addressed at the time of testing. If possible, the examinee should be positioned facing away from the door to ensure the examiner can verify through the examinee's camera that the door remains shut and can monitor any interruptions. The examiner should confirm that all other applications on the computer, laptop, or peripheral device are closed, the keyboard is moved aside or covered after the session is connected, and alerts and notifications are silenced on the peripheral device. Radios, televisions, other cellular phones, fax machines, smart speakers, printers, and equipment that emit noise must be silenced and/or removed from the room.

### Lighting

Good overhead and facial lighting should be established for the examiner and examinee. Blinds or shades should be closed to reduce sun glare on faces and the computer screens.

### Teleconferencing Software

Teleconferencing software is required. Screen-sharing capability is required if anything other than items with verbal stimuli and responses are administered. Because the examiner is required to demonstrate how to make slash marks and to correctly complete the graphic speed test task, a teleconferencing platform with whiteboard functionality is desirable.

### Video

High-quality video (HD preferred) is required during the administration. Make sure the full faces of the examiner and the examinee are seen using each respective web camera. The teleconferencing software should allow all relevant visual stimuli to be fully visible to the examinee when providing instruction or completing items; the view of the examiner should not impede the examinee's view of visual test stimuli.

### Peripheral Camera or Device

A standalone peripheral camera can be used to provide a view of the session from another angle or a live view of the examinee's progress. Alternately, a separate device (e.g., a smartphone with a camera or another peripheral device) can be connected to the teleconference and set in a stable position to show the examinee's pointing or written responses. The device's audio should be silenced and microphone should be muted to prevent feedback. The examiner should guide positioning of the peripheral camera/device before administering written response tasks (refer to Table 1) so that the examiner can see the examinee's real-time responses are captured.

This peripheral camera, trained on the examinee's hand, is strongly recommended to allow the therapist to make qualitative observations during the assessment tasks. Spend some time helping the facilitator set up and position this third camera (e.g., a smartphone with its own login to the teleconference) so that you can obtain a clear view of the examinee's hands. Online instructional videos (e.g., here) demonstrate how a smartphone may be used with common household objects (e.g., a tower or stack of books, paper weight, ruler, and rubber band or tape) to create an

4

improvised document camera for use during tasks involving response booklets. While using additional cameras or devices/objects may not be an optimal solution for telepractice, it can be functional if executed well.

In a typical telepractice session, it is more feasible to make a document or moveable camera available in the examinee's location. However, the only camera available may be a stationary camera integrated into the examinee's laptop or computer screen. It is unrealistic to expect examinees to have document cameras within their homes. It may be necessary for examiners to think creatively about how to use a smartphone or other device in the examinee's location to gain a view of the examinee's progress in a response booklet or when pointing at a screen. Before attempting this with an examinee, the examiner should work to become fluid and competent at directing examinees in these methods, which can require extensive practice with varied individuals and types of devices. In addition, this requires planning and practice in the initial virtual meeting to prevent technical difficulties, and so the examinee and facilitator feel confident doing this when it is time.

# 2. Assessment Materials & Procedures

## Test Item Security

The examiner is responsible for ensuring test item security is maintained, as outlined in the Terms and Conditions for test use. The examiner should address test security requirements with the examinee (and facilitator, if applicable) during the informed consent process. The examiner should make it clear to the examinee/caregivers that the video should not be captured, photos should not be taken, and stimuli should not be copied or recorded, as this is a copyright violation. The examinee must agree that they will not record (audio or visual) or take photos or screenshots of any portion of the test materials or testing session, and not permit anyone to observe the testing session or be in the testing room (except for a facilitator, when necessary). Any test-related materials used in the testing session must be returned to the examiner.

## Disruptions

The examiner should record any and all atypical events that occur during the testing session. This may include delayed audio or video, disruptions to connectivity, the examinee being distracted by external stimuli, and any other anomalies. These can be noted on the record form, if applicable, and should be considered during interpretation and described in the written report. Refer to Other Considerations for guidance on report writing.

If there is a problem with the teleconferencing quality, all other nonessential applications on the examiner's computer should be closed. Likewise, the examinee should close all other applications on their computer, laptop, or other device for faster administration performance.

## Examiner Materials

The examiner should assemble all the materials needed to administer the test, including a copy of the test manual (in either Pearson-delivered digital version or hard copy format) from which to read the instructions. If using the digital manual, it should be open somewhere other than on the device

used for the teleconference (e.g., a phone or a second computer screen). The examiner must provide paper copies of the test template cards A, B, C, and D (available in the Q-global Resource Library to print) in advance of the testing session, and the plan for securing and forwarding/returning materials, real-time and after testing, should be communicated. The examiner will also need a device for timing. If using a phone to access the test manual, the examiner will need a stopwatch or additional timer available because the phone's stopwatch function will be unavailable. The examiner should also have an examiner record form readily available to record observations.

## Examinee Response Materials

For telepractice, the examiner must provide the correct copies of response materials to the facilitator in advance of the testing session and communicate the plan for securing and forwarding/returning materials, real-time and after testing. Photocopies of the test template cards A, B, C, and D (made in the same manner as for in-person assessments) must be mailed out to the facilitator prior to the assessment session. Materials should be sent with enough time for delivery before the day of the evaluation. The facilitator should open the envelope on camera only after being requested to do so. The examiner provides a prepaid envelope for return of the completed sheets to the examiner to enable scoring in a timely manner. To control the quality of the materials and ensure they are not shared with others, the examiner must not email the templates of the reproducible cards to the facilitator for printing. Before mailing the materials to the facilitator, the examiner may choose to draw an example slash mark on one of the sheets of lined paper and complete some of the practice graphic speed circles to demonstrate how to do these correctly, or the examiner may also train the facilitator in advance of the testing session to correctly demonstrate these tasks.

After the test is completed, the examiner may ask the facilitator to hold the completed sheets of writing up to the screen in order to take a screenshot of each one. While insufficient to properly score the test, this will allow the examiner a first look at the examinee's performance and will provide a record of the results should the materials get lost en route to the examiner.

## Digital Assets

The examiner should practice using any digital assets until the use of the materials is as smooth as an in-person administration. Refer to *Using Your Digital Assets on Q-global* in the Q-global Resource Library for complete directions.

## Gesturing

It may on occasion be necessary for the examiner to gesture to areas of a paper copy or the template of one of the reproducible cards on the examiner's camera.

## Content Considerations

Review Table 1 for the specific telepractice considerations for each subtest to be administered.

**Table 1. Specific Telepractice Considerations**

| Subtest(s) | Considerations |
|---|---|
| Copy Best | • A facilitator is recommended.<br>• Requires photocopies of the reproducible test template cards A and B in the examinee's location.<br>• Requires the examinee's usual writing pen or sharpened pencil in the examinee's location.<br>• Requires examiner to have a timer or stopwatch and instruct the examinee when to make a time mark or stop writing.<br>• Have the reproducible test template cards in the examiner's location as well to show briefly on camera to orient the facilitator and examinee to the next item, if needed.<br>• Requires a table and chair appropriate for the examinee's size (i.e., can sit comfortably to work at the table while resting feet on the floor). Test materials are positioned so that they are centered with the examinee's body and squared on the desk.<br>• Place the peripheral camera/device in a stable position to show examinee's performance on tasks.<br>• Follow the instructions described for administration and scoring in Chapter 2 of the DASH or DASH 17+ manual. |
| Alphabet Writing | • A facilitator is recommended.<br>• Requires photocopy of the reproducible test template card A in the examinee's location.<br>• Requires the examinee's usual writing pen or sharpened pencil in the examinee's location.<br>• Requires examiner to have a timer or stopwatch and instruct the examinee when to stop writing.<br>• Have the reproducible test template cards in the examiner's location as well to show briefly on camera to orient the facilitator and examinee to the next item, if needed.<br>• Requires a table and chair appropriate for the examinee's size (i.e., can sit comfortably to work at the table while resting feet on the floor). Test materials are positioned so that they are centered with the examinee's body and squared on the desk.<br>• Place the peripheral camera/device in a stable position to show examinee's performance on tasks.<br>• Follow the instructions described for administration and scoring in Chapter 2 of the DASH or DASH 17+ manual. |

| Subtest(s) | Considerations |
|---|---|
| Copy Fast | • A facilitator is recommended.<br><br>• Requires photocopies of the reproducible test template cards A and B in the examinee's location.<br><br>• Requires the examinee's usual writing pen or sharpened pencil in the examinee's location.<br><br>• Requires examiner to have a timer or stopwatch and instruct the examinee when to stop writing.<br><br>• Have the reproducible test template cards in the examiner's location as well to show briefly on camera to orient the facilitator and examinee to the next item, if needed.<br><br>• Requires a table and chair appropriate for the examinee's size (i.e., can sit comfortably to work at the table while resting feet on the floor). Test materials are positioned so that they are centered with the examinee's body and squared on the desk.<br><br>• Place the peripheral camera/device in a stable position to show examinee's performance on tasks.<br><br>• Follow the instructions described for administration and scoring in Chapter 2 of the DASH or DASH 17+ manual. |
| Graphic Speed | • A facilitator is recommended.<br><br>• Requires photocopy of the reproducible test template card C in the examinee's location.<br><br>• Requires the examinee's usual writing pen or sharpened pencil in the examinee's location.<br><br>• Requires examiner to have a timer or stopwatch and instruct the examinee when to stop writing.<br><br>• Have the reproducible test template cards in the examiner's location as well to show briefly on camera to orient the facilitator and examinee to the next item, if needed.<br><br>• Requires a table and chair appropriate for the examinee's size (i.e., can sit comfortably to work at the table while resting feet on the floor). Test materials are positioned so that they are centered with the examinee's body and squared on the desk.<br><br>• Place the peripheral camera/device in a stable position to show examinee's performance on tasks.<br><br>• Follow the instructions described for administration and scoring in Chapter 2 of the DASH or DASH 17+ manual.<br><br>• Examiner must determine how to most closely align with standard procedures to demonstrate to the examinee how to draw Xs in the circles. |

| Subtest(s) | Considerations |
|---|---|
| Free Writing | • A facilitator is recommended.<br><br>• Requires photocopy of the reproducible test template card D in the examinee's location.<br><br>• Requires the examinee's usual writing pen or sharpened pencil in the examinee's location.<br><br>• Requires examiner to have a timer or stopwatch and instruct the examinee when to make a time mark or stop writing.<br><br>• Have the reproducible test template cards in the examiner's location as well to show briefly on camera to orient the facilitator and examinee to the next item, if needed.<br><br>• Requires a table and chair appropriate for the examinee's size (i.e., can sit comfortably to work at the table while resting feet on the floor). Test materials are positioned so that they are centered with the examinee's body and squared on the desk.<br><br>• Place the peripheral camera/device in a stable position to show examinee's performance on tasks.<br><br>• Follow the instructions described for administration and scoring in Chapter 2 of the DASH or DASH 17+ manual. |

## Evaluating Equivalence Evidence

Examiners should review the current research available on equivalence between different modes of administration before proceeding to use remote administration of a standardized assessment with normative data collected via in-person assessment. When reviewing the literature, the examiner should consider the input and output requirements for each task, and the evidence available for telepractice equivalence for the specific task type. Direct evidence of equivalence for a specific task may be available because the task was researched in a study with results indicating no significant difference between telepractice and in-person assessment. Indirect evidence may also be reported in the literature for a task that is similar in construct and input/output demands to the standardized assessment being considered for remote administration and may help determine the examiner's level of confidence in applying the norms. For instance, a study demonstrating direct evidence for the Repeatable Battery for the Assessment of Neuropsychological Status (RBANS) Picture Naming subtest also demonstrates valuable indirect evidence for the WISC-V Vocabulary and CLQT+ Confrontation Naming subtests because Picture Naming, Vocabulary, and Confrontation Naming all require brief spoken directions with pictorial stimuli inputs with open-ended spoken response outputs. Examiners can have more confidence that the normative scores are valid when tasks have direct evidence showing equivalency between modes.

In reviewing the literature of telepractice–in-person and digital–traditional investigations, professionals should also be mindful of the age range and population (e.g., clinical group) of the research study to consider relevancy for the examinee. Greater caution is recommended when only indirect evidence of equivalency is available for a task, or when equivalence has not been established for a particular examinee's age range and clinical condition. However, it can be informative to consider any such available evidence when considering impact of remote

administration on results and interpretation. Pearson Clinical Assessment is tracking and aggregating the relevant equivalence evidence for our assessments, including the age range, population, direct evidence, and indirect evidence (see Evidence for Remote Assessment).

Table 2 lists the input and output requirements of each task. The abbreviations in the Input and Output column correspond to the various input and output requirements of each task, and a key appears at the bottom of the table. For example, brief spoken directions as an input requirement is abbreviated as BSD.

**Table 2. Input and Output Requirements**

| Task | Input[a] | Output[b] |
|------|----------|-----------|
| Copy Best | BSD, GD, PM, RB, SP, SS | TT, WFMR |
| Alphabet Writing | BSD, GD, PM, RB, SP, SS | TT, WFMR |
| Copy Fast | BSD, GD, PM, RB, SP, SS | TT, WFMR |
| Graphic Speed | BSD, GD, MD, PM, RB, SP, SS | SWR, TT, WFMR |
| Free Writing | BSD, GD, PM, RB, SP, SS | OE, TT, WFMR |

Note. [a]Input abbreviations are: BSD = Brief spoken directions, GD = Gestured directions, MD = Motor demonstration, PM = Physical manipulatives, RB = Paper response booklet, SP = Letters, digits, or symbols in print, SS = Spoken stimuli

[b]Output abbreviations are: OE = Open ended, SWR = Simple written response, TT = Task-level time limit, WFMR = Written or fine motor response

# 3. Examinee Considerations

## Appropriateness

The examiner should first ensure that a telepractice administration is appropriate for the examinee and for the purpose of the assessment. Clinical judgment, best practice guidance for telepractice (e.g., AOTA, 2020; APA Services, 2020; ASPPB, 2013; IOPC, 2020), information from professional organizations and other professional entities (e.g., licensing boards, legal resources, professional liability insurance providers, payors), consultation with other knowledgeable professionals, existing research, and any available federal or state regulations should be considered in the decision-making process. Consideration should be given to whether the necessary administrative and technological tasks involved in a telepractice session can be accomplished without influencing results.

## Preparedness

Before initiating test administration, the examiner should ensure that the examinee is well-rested, able, prepared, and ready to appropriately and fully participate in the testing session.

## Facilitator Role

If using a facilitator, the role of the facilitator must be explained to the examinee so participation and actions are understood.

## Headset

It may not be appropriate or feasible for some examinees to use a headset due to behavior, positioning, physical needs, or tactile sensitivities, or if a headset is not available. Clinical judgement on the appropriate use of a headset in these situations should be used. If a headset is not utilized, the examiner's and examinee's microphones and speakers should be turned up to a comfortable volume.

## Mouse

On some teleconferencing software, the examiner can pass control of the mouse to allow the examinee to point to indicate responses; this is an option if it is within the capabilities of the examinee. However, best practice guidelines provide cautions about this. For example, the IOPC guidelines suggest examiners be alert throughout administration, resume control of the screen once the task is finished, and never leave the computer unattended while the examinee has control over the examiner's computer (IOPC, 2020).

# 4. Examiner Considerations

## Practice

During the telepractice setup, and before administering to any actual examinee, the examiner should rehearse the mechanics and workflow of every item in the entire test using the selected teleconferencing software so that the examiner is familiar with the administration procedures. For example, a colleague could be used as a practice examinee.

## Standardized Procedures

The examiner must follow the administration procedures of in-person administration as much as possible. For example, if a spoken stimulus cannot be said more than once in in-person administration, the examiner must not say it more than once in a telepractice administration unless a technical difficulty precluded the examinee from hearing the stimulus.

## Real-Time Troubleshooting

In order to conduct a smooth telepractice session, audiovisual needs and materials must be managed appropriately. The initial virtual meeting involves the examiner, examinee, and/or the facilitator (if used), and is the opportunity for the examiner to provide information about the audiovisual needs and materials. During the initial virtual meeting, the examiner should provide training in troubleshooting audiovisual needs that arise during the testing session, including camera angle, lighting, and audio checks. The examiner should provide verbal feedback to guide camera adjustment, checking the on-screen video shown by the peripheral camera/device to provide information about how to reposition it until the proper view is shown. The examiner should emphasize that no materials should be opened until the examiner provides instructions to do so, if applicable. The examiner should also expect to provide verbal guidance about these issues during the testing session.

**Collaborating With Facilitators**

If used, the facilitator is to assist with administrative and technological tasks and not to manage rapport, engagement, or attention during the testing session. The examiner should direct them not to interfere with the examinee's performance or responses. Any other roles and responsibilities for which an examiner needs support, such as behavior management, should be outlined and trained prior to the beginning of the testing session. The examiner is responsible for documenting all behaviors of the facilitator during test administration and taking these into consideration when reporting scores and performance. Refer to the Telepractice Environment & Equipment section and to Table 1 for specific subtest telepractice considerations.

## 5. Other Considerations

There are special considerations for written reports describing testing that takes place via telepractice. The professional completing the written report should state in the report that the test was administered via telepractice, and briefly describe the method of telepractice used. The professional should also make a clinical judgment, similar to an in-person session, about whether or not the examiner was able to obtain the examinee's best performance. Clinical decisions should be explained in the report, including comments on the factors that led to the decision to conduct testing via telepractice and to report all (or not to report suspect) scores. In addition, it is recommended that the report include a record of any and all atypical events during the testing session (e.g., delayed video or audio, disruptions to connectivity, extraneous noises such as phone ringing or loud dog barking, person or animal unexpectedly walking into room, the examinee responding to other external stimuli). List and describe these anomalies as is typical for reporting behavioral observations in the written report, as well as any observed or perceived impact on the testing sessions and/or results, and consider these in the interpretation of results.

An example of a written report might include:

> *"The DASH was administered via remote telepractice and a facilitator monitored the administration on-site using printed materials during the live video connection using the [name of telepractice system, e.g., Zoom] platform. The remote testing environment appeared free of distractions, adequate rapport was established with the examinee via video/audio, and the examinee appeared appropriately engaged in the task throughout the session. No significant technological problems or distractions were noted during administration. Modifications to the standardization procedure included: [list]. Tasks similar to DASH have received initial validation in several samples for remote telepractice, and the results are considered a valid description of the examinee's skills and abilities."*

## Conclusion

This test was not standardized in a telepractice mode, and this should be taken into consideration when utilizing this test via telepractice and interpreting results. For example, the examiner should consider relying on convergence of multiple data sources and/or being tentative about conclusions. Provided that the examiner has thoroughly considered and addressed the factors and the specific considerations as listed above, the examiner should be prepared to observe and comment about

the reliable and valid delivery of the test via telepractice. Materials may be used via telepractice without additional permission from Pearson in the following published contexts:

- DASH and DASH 17+ materials via Q-global

- DASH and DASH 17+ via a Pearson-licensed telepractice provider/platform

*Any* other use of this test via telepractice is not currently recommended. This includes, but is not limited to, scanning the laminated test template cards, digitizing the paper record forms, holding the materials physically up in the camera's viewing area, or uploading a manual onto a shared drive or site.

# References

American Occupational Therapy Association (AOTA). (2020). Telehealth Resources. https://www.aota.org/Practice/Manage/telehealth.aspx

American Psychological Association Services (APA Services). (2020). *Guidance on psychological tele-assessment during the COVID-19 crisis.* (2020). https://www.apaservices.org/practice/reimbursement/health-codes/testing/tele-assessment-covid-19?fbclid=IwAR1d_YNXYS2Yc5mdIz_ZlYSkrrJ_6A9BQeKuIHxEEjjRh1XDR6fOYncM3b4

Association of State and Provincial Psychology Boards (ASPPB). (2013). *ASPPB telepsychology task force principles and standards.* http://houstonneuropsych.com/wp-content/uploads/2020/04/ASPPB_TELEPSYCH_PRINCIPLES.pdf

Cason, J., Hartmann, K., & Richmond, T. (2018). Telehealth in occupational therapy. *The American Journal of Occupational Therapy, 72,* 1–18. https://doi.org/10.5014/ajot.2018.72S219

Eichstadt, T. J., Castilleja, N., Jakubowitz, M., & Wallace, A. (2013, November). Standardized assessment via telepractice: Qualitative review and survey data [Paper presentation]. Annual meeting of the American Speech-Language-Hearing Association, Chicago, IL, United States.

Grosch, M. C., Gottlieb, M. C., & Cullum, C. M. (2011). Initial practice recommendations for teleneuropsychology. *The Clinical Neuropsychologist*, 25, 1119–1133.

Inter Organizational Practice Committee (IOPC). (2020). Recommendations/guidance for teleneuropsychology (TeleNP) in response to the COVID-19 pandemic. https://static1.squarespace.com/static/50a3e393e4b07025e1a4f0d0/t/5e8260be9a64587cfd3a9832/1585602750557/Recommendations-Guidance+for+Teleneuropsychology-COVID-19-4.pdf

Stolwyk, R., Hammers, D. B., Harder, L., & Cullum, C. M. (2020). *Teleneuropsychology (TeleNP) in response to COVID-19.* https://event.webinarjam.com/replay/13/pyl2nayhvspsp09

Refer to the following studies regarding the appropriateness of administering standardized and/or neuropsychological assessments via computer or other electronic means:

Brearly, T. W., Shura, R. D., Martindale, S. L., Lazowski, R. A., Luxton, D. D., Shenal, B. V., & Rowland, J. A. (2017). Neuropsychological test administration by videoconference: A systematic review and meta-analysis. *Neuropsychology Review, 27*(2), 174–186.

Cullum, C. M., Hynan, L. S., Grosch, M., Parikh, M., & Weiner, M. F. (2014). Teleneuropsychology: Evidence for video teleconference-based neuropsychological assessment. *Journal of the International Neuropsychological Society, 20*(10), 1028–1033.

Galusha-Glasscock, J. M., Horton, D. K., Weiner, M. F., Cullum, C. M. (2016). Video teleconference administration of the Repeatable Battery for the Assessment of Neuropsychological Status. *Archives of Clinical Neuropsychology, 31*(1), 8–11. https://doi.org/10.1093/arclin/acv058

Temple, V., Drummond, C., Valiquette, S., & Jozsvai, E. (2010). A comparison of intellectual assessments over video conferencing and in-person for individuals with ID: Preliminary data. *Journal of Intellectual Disability Research, 54*(6), 573–577.