Using e-interpreting for home-based assessments

A protocol prepared as part of the broader study:

*Improving Service Knowledge and Access among Older People from Culturally and Linguistically Diverse with Dementia: Diagnosis and Access Through E-interpreting (DATE)*

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USING E-INTERPRETING FOR HOME-BASED ASSESSMENTS

This document was developed as an outcome of the study: “Improving Service Knowledge and Access among Older People from Culturally and Linguistically Diverse (CALD) backgrounds with Dementia”, short title: “Diagnosis and Access Through E-interpreting” (DATE), conducted at the National Ageing Research Institute (NARI) from 2017 to 2019. The document presents guidelines for clinicians and health services who are considering using e-interpreting for home-based assessments; in particular, dementia assessments.
INTRODUCTION: WHY USE E-INTERPRETING?

In 2016, 21% of Australians spoke a language other than English at home (ABS, 2017). As Australia’s population continues to grow and diversify, there will be an increasing need for access to interpreters in health settings. Interpreters are especially important for health care consultations and assessments as accuracy and professional communication is crucial. This is especially so for cognitive assessments as non-native English speakers living with dementia can experience a loss in English proficiency as a symptom of dementia (Tipping & Whiteside, 2015).

We know from previous research that using professional interpreters improves patient outcomes, satisfaction and quality of care (Flores, 2005; Karliner, Jacobs, Chen, & Mutha, 2007). This is reflected in the Victorian Government’s policies which state that the provision of interpreters is an obligation for health providers (Victorian Government, 2011). Clinical practice guidelines in other states also recommend using accredited interpreters for health consultations (see NSW Health, 2007; Queensland Health, 2007).

Unfortunately, there is a shortage of professional interpreters for many language groups in Australia, which can make it difficult to access interpreters when providing services to culturally and linguistically diverse (CALD) people. This is even more pronounced in rural and remote regions where fewer interpreters reside. Consequently, CALD clients may go without health treatments or may be placed for indefinite periods on waiting lists until an interpreter is available. The barriers to accessing interpreters constitutes a potential delay to diagnosis and treatment, and can increase the likelihood of negative health outcomes for the client.

E-interpreting offers a practical solution in such situations. Improvements in internet technology over the last decade mean that interpreters can now perform their job in a different location to the health professional and client or patient. This reduces travel time and expenses for interpreters and increases the availability of interpreters for health assessments and consultations in rural locations. However, until recently, there has been a lack of evidence about the effectiveness of e-interpreting during cognitive assessments, and consequently a reluctance to make use of this mode by services (Haralambous, Subramaniam, Hwang, Dow, & LoGiudice, 2019).
The National Ageing Research Institute Ltd. (NARI) has investigated the viability of e-interpreting, and especially whether e-interpreting could be used for home-based dementia assessments. A study, “Diagnosis and Access Through E-Interpreting” (DATE), was conducted during 2017-2019 which compared e-interpreting with traditional face-to-face interpreting through using the Rowland Universal Dementia Assessment Scale (RUDAS) and Geriatric Depression Scale (GDS) tools – both commonly used to screen for dementia. Findings from the DATE study suggest there are minimal differences in the results of the two assessment tools when comparing e-interpreting to face-to-face interpreting. This is a promising outcome as it shows that e-interpreting is a viable and reliable option for conducting home-based dementia assessments.

During the DATE study, clients, clinicians and interpreters were asked to share their experiences and opinions about e-interpreting after they participated in assessments.

- **Most participants preferred face-to-face interpreting if it is available** due to better rapport between clients, clinicians and interpreters. Some clinicians reported that rapport was an important consideration when dealing with sensitive circumstances, such as instances of elder abuse or when clients are severely distressed/depressed.

- **When no face-to-face interpreter is available, the majority of participants in the DATE study agreed that e-interpreting is the best alternative.** When the choice is between e-interpreting, telephone-interpreting, or not having an interpreter at all, almost all participants regarded e-interpreting as the preferable option.

- **Face-to-face interpreting also avoids some of the technological and operational challenges associated with e-interpreting,** which will be discussed below.

- **Some interpreters in the DATE study expressed a preference for e-interpreting because it allowed a more formal relationship with clients.** This is consistent with previous studies where face-to-face interpreters have reported feeling conflicted between their roles as impartial interpreters of medical communication, and as fellow members of clients’ community and culture (Brisset, Leanza, & Laforest, 2013). E-interpreting was generally seen as a more formal and less intimate way of interacting.

We recommended that face-to-face interpreting remain the standard, and should be the first choice when an interpreter is required during home-based assessments. However when a face-to-face interpreter is not available, e-interpreting is the best alternative.
GETTING STARTED WITH E-INTERPRETING

This section outlines the equipment, infrastructure and practices that are required to undertake e-interpreting successfully when a health professional is attending an appointment in the client’s home.

NECESSARY EQUIPMENT

Video-interpreting relies on computer and internet technology, and therefore requires the following equipment for both clinicians and interpreters. Purchasing and setting up the equipment ahead of time is necessary.

A VIDEOCONFERENCING DEVICE

Both clinician and interpreter will require their own videoconferencing devices. These could be a computer, laptop, tablet or smartphone. Both devices require a video camera, microphone and speaker, and must be compatible with the chosen videoconferencing platform. Clinicians performing aged care assessments may already carry an appropriate device as part of their routine practice. However, it is important to consider whether using the devices for e-interpretation will impact on existing practices.

ADDITIONAL SPEAKERS, MICROPHONES, AND CAMERAS (OPTIONAL)

Separate video cameras or microphones can be attached to improve image or recording quality. Additional speakers can be used to increase volume and/or sound quality. This may be necessary if clients have hearing difficulties.

MOBILE BROADBAND DONGLE

A pre-paid mobile broadband dongle offers a convenient, portable and simple way of connecting to the internet. There are a wide variety of these sold by mobile broadband providers, and they can be connected to videoconferencing devices either by wireless networking or by USB connection.

SETTING UP AN INTERNET CONNECTION

A 4G mobile broadband connection is recommended for video-conferencing services. Where 4G is unavailable, a 3G connection can be used but may offer poorer video and sound quality which can affect interpretation. Clinicians should ensure that dongles have enough available data at the time of use to complete the assessment. 1GB is sufficient data for sessions lasting up to an hour.

TESTING AN INTERNET CONNECTION

It is good practice to test the connection on-location prior to beginning an e-interpreting session.

The website www.ozspeedtest.com provides a free bandwidth test.
Users should be aware that mobile broadband service providers have different coverage depending on region, and speeds may fluctuate depending on the time of day and number of other users in the vicinity. It is advisable to check which service provider has best coverage in your location, and check the connection and bandwidth prior to commencement. Microsoft suggests 1.2Mbps as a minimum bandwidth for video-conferencing. Carrying additional dongles from different internet providers offers alternatives when facing connection difficulties.

## CHOOSING A VIDEOCONFERENCING PLATFORM

There are many videoconferencing platforms available. When relaying confidential and sensitive medical or personal information, it is important to use a platform that offers encryption to ensure that privacy is protected. Videoconferencing platforms which offer encryption include Zoom, Healthdirect Video Call, and Skype Business. Many encrypted videoconferencing platforms require the purchase of a license, but some, such as Zoom, are free.

It is important to check for information about the licensing agreement, features, terms and conditions of the videoconferencing platform to ensure it is adequate to your needs. When selecting a platform for your practice or service, user-friendliness should be a priority for both clinicians and interpreters. Ensuring that interpreters can access and are familiar with the videoconferencing platform before commencing a session prevents technical difficulties.

## LOGISTICAL ASSISTANCE

It is recommended that health providers have dedicated staff such as telehealth or IT teams to manage the implementation of e-interpreting technologies, and offer technical or administrative support. This is important to assist clinicians with troubleshooting any issues that may arise. It is also important to ensure the partnering interpreting agencies offer equipment and technical support to their interpreters.

## TRAINING CLINICIANS IN THE TECHNOLOGY

Training and preparation of clinicians in the technology is necessary to reduce the likelihood of technical issues interfering with e-interpreting sessions. It is recommended that services implementing e-interpreting have a member of staff on hand who can provide training and orientation for clinicians in using e-interpreting technologies. The participants in the DATE study reported that their individual training took about 30 minutes.
Good communication is key to effective video-interpretation. Considerations are outlined in this section.

**PRE AND POST BRIEFINGS BETWEEN CLINICIANS AND INTERPRETERS**

Pre and post briefing sessions between clinicians and interpreters are shown to help avoid some of the problems that arise during video-interpreting sessions (Haralambous, Tinney, LoGiudice, Lee, & Lin, 2018). Briefing sessions might be used to provide background about the individual client, as well discussing any concerns about the technology or platform, client confidentiality, or the assessment process. Interpreters in the DATE project reported using post-assessment briefings to discuss ambiguities in translating concepts or instructions for the client with clinicians. It is recommended that interpreters have knowledge of the assessment tools and tests ahead of time, including translations of the questions, and relevant terms and concepts. Adequate industry level training in these tools for interpreters is not currently available, which means there is uneven knowledge among interpreters. Such knowledge can prevent interpretation delays or mistakes, and reduce cross-talk during the assessment. Validated translations of tools such as the GDS and RUDAS (used in this study) into some languages are already available. Where translations are not available, interpreters can be provided with the English language assessment tools beforehand from clinicians to allow them time for preparation.

**CAMERA AND SEATING POSITION**

Positioning the videoconferencing device midway between the clinician and the client ensures they are both visible to the interpreter (Figure 1). Previous research has recommended that cameras and monitors should not obscure eye contact and/or interpersonal interaction between the clinician and client (Locatis et al., 2010). Clinicians have reported being more comfortable when the client is looking at them rather than the videoconferencing device while speaking during the assessment. Speaking directly to the client using first person pronouns supports this. Moreover, clinicians can explain to the client at the beginning of the session that the interaction is between them, and that the client’s questions or concerns should be addressed to the clinician rather than to the interpreter.

*Figure 1: It is best practice to ensure that all parties can maintain eye-contact with everyone else during the e-interpreting session*
CULTURAL SENSITIVITY

An Interpreter’s knowledge and competence with the client’s language and culture can support the clinician in interpreter-mediated cognitive assessments. Interpreters may assist the clinician by explaining when terms do not exist in the client’s language, by explaining social etiquette and conventions, or gendered expectations.

Previous studies (Haralambous, Mackell, Lin, Fearn, & Dow, 2018; Haralambous, Tinney, et al., 2018) have found that the presence of an interpreter, who is familiar with a client’s language and culture, is reassuring for some clients. However, clients may be less reassured by e-interpreters who are less able to perceive the body language and verbal cues of the interaction. In cases where the client is distressed during e-interpretation, the presence of a family member can offer appropriate support.

TRAINING FOR INTERPRETERS AND CLINICIANS

Adequate and up-to-date training has been highlighted as crucial by both interpreters and clinicians. Training about cognitive impairment, including tools and assessment methods used in cognitive assessment are recommended for interpreters. There is currently no industry-wide training program on dementia or cognitive assessments available to interpreters working in Australia.

For clinicians, cultural awareness training, and training in the use of interpreters is recommended. In addition, both interpreters and clinicians have reported that training in the use of relevant videoconferencing platforms, including troubleshooting technical problems, would be beneficial.

FAMILY MEMBERS AND THE ASSESSMENT ENVIRONMENT

It is common for family members to be present for cognitive assessments or health consultations with CALD clients. The presence of family can be an important source of support and reassurance for clients, especially for those who may be experiencing cognitive decline. When a clinician is not accompanied by an interpreter, a member of the client’s family is often the crucial first point of communication when a clinician arrives for an appointment.

When conducting an e-interpreting session, it is important that the interpreter can clearly see and hear all individuals participating in the session, and that only one person speaks at a time. Interpreters in the DATE study reported that interpreting became difficult when family members were present in the background, conversing with the client or clinician, but were not clearly audible or visible to the interpreter. If clients and their families are made aware of this prior to the commencement of an e-interpreting session, it can help reduce interference and cross-talk, and ensure the interpretation is as accurate and effective as possible.
ISSUES AND PROBLEM-SOLVING

Video-interpreting is more prone to technical and operational problems than face-to-face interpretation, which are reasons why the latter is still the preferred method. However, steps can be taken to reduce the likelihood of problems arising and interfering with cognitive assessments.

TECHNICAL ISSUES

CONNECTION PROBLEMS

In remote areas or during times when networks are congested, mobile broadband coverage can be limited. This increases the possibility of delays, drop outs, and poor sound and voice quality. During the DATE study, there were a small number of incidents where clinicians reported being unable to get a connection at all, and therefore had to reschedule the session. Testing the connection and trialling different mobile broadband services beforehand can help mitigate connection problems.

ACCESSIBILITY PROBLEMS

Both interpreters and clinicians have reported difficulties in navigating different videoconferencing platforms. These difficulties have resulted in problems connecting, and being unable to see or hear each other during the session. Ensuring devices are set up and ready to use ahead of time at both the interpreter’s and clinician’s end can prevent these issues. These accessibility issues become far less likely when clinicians and interpreters have adequate training and experience.

IMPACT ON CLIENTS

Technical failures can have an impact on clients, especially when it means they are unable to communicate with the clinician. Some clinicians have reported clients becoming distressed or confused because of technical issues interfering with their assessment or consultation. In these situations, clients’ family members have been able to offer positive reassurance to clients.

OPERATIONAL ISSUES

During the DATE study, various operational issues arose before or during which prevented or delayed the assessments. Some clinicians reported that clients were not at home when they arrived for home-based appointments. This reaffirms the importance of contacting clients prior to the assessment, especially as clients could have difficulties remembering appointments.

HEARING OR VISION IMPAIRMENT OF CLIENTS

Some clinicians and interpreters encountered difficulties when clients had hearing or vision impairments. Ensuring the client is positioned close to the device, and using additional
speakers or microphones, or a larger screen and better lighting, can mitigate these barriers. In cases of severe hearing or vision impairment, e-interpreting may not be appropriate for the client.

**COGNITIVE IMPAIRMENT OF CLIENTS**

Some clients may be experiencing advanced cognitive impairment. This can sometimes become an obstacle to successful e-interpreting as clients may have difficulties understanding the use of technology and the role of the interpreter in the assessment. Clinicians are therefore responsible for assessing the client’s capabilities before arranging an e-interpreting session.

**ARRIVING WITHOUT AN INTERPRETER**

Clinicians also reported occasional difficulties communicating with clients upon arrival, before connecting to the e-interpreting session. Some clinicians advised connecting to the interpreter before meeting with the client to avoid initial communication difficulties. Others said this was a cumbersome solution because it required them to carry around a connected device. In any case, it is recommended that clinicians ensure the client is reminded of the appointment time, and aware that it will be an e-interpreting session, close to the assessment.

**INTERPRETER CANCELLATION OR LACK OF AVAILABILITY**

Clinicians in our study reported that they still faced some difficulties booking interpreters when using e-interpreting, just as they do with face-to-face. Due to interpreter demand, clinicians still faced cancellations from interpreters which were not always able to be replaced.

For interpreting agencies, it is useful to provide the interpreter with sufficient training or support to troubleshoot technical issues. The level of preparation and support for e-interpreting is worth discussing with an interpreting service before commencing e-interpreting, including their booking and cancellation policy.

**FURTHER INFORMATION**

Further information about the DATE study can be found in the Final Report, published on the NARI website: [www.nari.net.au](http://www.nari.net.au). Information about the study is also available in various academic papers, including a literature review (Haralambous et al., 2019). Published papers are listed in the publications section of the NARI website.
REFERENCES


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