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Managing Memory Clinics during the COVID-19 pandemic: initial perspectives from the Australian Dementia Network Memory Clinics network
April 2020

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Learnings from the first weeks of clinical practice in times of COVID-19

COVID-19 is posing exceptional challenges to Australian healthcare. The diagnosis and care of people with dementia and cognitive decline is no exception. With older adults being at particular risk of developing serious illnesses due to a COVID-19 infection, specialised services for the assessment of dementia and cognitive decline (hereafter: Memory Clinics) need to find new ways to provide essential services to their clients. Conflicting recommendations and regulations across Australia increase uncertainty among Memory Clinic clinicians and clients. Here, we summarise our learnings from national stakeholders regarding adaptations to practice and care to date. This document was developed to provide some guidance and support for clinicians in this challenging time. The recommendations and advice below are subject to change as this is a rapidly evolving field and guidelines need to be adjusted to the latest evidence and recommendations by the Australian Government.

KEY LEARNINGS

1. The large majority of memory clinics have ceased all but urgent face-to-face assessments.
2. Liaison with primary care and screening systems are being utilized to triage referrals.
3. Dementia Australia has increased its support services for those in need. Extra care packages may need to be put in place for those living alone, and/or those feeling anxious or socially isolated.
4. Dementia Australia are continuing to offer certain carer support groups via online platforms
5. Telehealth services are now being deployed for initial screening assessments.
6. Neuropsychologists are well placed to adapt their practice and conduct web-based assessments, as well as offer cognitive rehabilitation.
7. Peer support networks are being established for those seeking support.

TABLE OF CONTENTS

INTRODUCTION

Coronaviruses are a large family of viruses that cause respiratory infections ranging from common cold symptoms to serious diseases (e.g., pneumonia). COVID-19 is the disease caused by a new coronavirus that has led to a worldwide pandemic. The risk of serious illness from COVID-19 increases with age and in those with underlying health conditions that affect the respiratory system or immune system.

People living with dementia or cognitive impairment may have difficulty understanding and following health instructions. They may find it difficult to communicate that they are feeling unwell and accurately describe their symptoms. This is especially so where there is a limited capacity to communicate verbally or express pain and discomfort. In this situation, observation by someone who knows the person with dementia may assist in identifying changes in their health status. The stressful situation, increased anxiety and social isolation may also make people with cognitive decline or dementia more vulnerable to physical and mental health issues, and place strain on carers.

Social distancing, less involvement of extended family and the closure of non-essential medical services and re-deployment of clinical staff to frontline medical services is posing unprecedented challenges for Memory Clinics. This perspective paper was developed to summarise some of the clinical practice adjustments Memory Clinics have already deployed. It is hoped that the sharing of this information will provide some initial guidance and support and reduce common uncertainties among Memory Clinic staff and clients. Additionally, this document will also provide a basis for a future response plan that might be useful if a similar health emergency situation occurs again.

MAINTAINING ESSENTIAL SERVICES

PRIORITY ASSESSMENTS AND SERVICES (Category/ Priority 1)

Memory clinics have articulated that services have needed to be prioritised. Most clinics have stopped the assessment of new clients, but this will need to be reviewed on an ongoing basis and depending on the duration of the pandemic. However, referrals from high priority cases (i.e., often referred to as **category/ priority 1 in some states)** will still be considered for assessment via telephone or web-based telehealth, or face-to-face where necessary. The general 'rule of thumb' is that if the referral could result in presentation to an emergency department, it is deemed high priority, as follows:

- Presence of **concerning features** (may include but not limited to):

  - Behavioural and Psychological Symptoms of Dementia (BPSD) – moderate to severe stage include rapidly evolving (over weeks);

  - Unresolved safety concerns in current living situation (patient or caregiver);

  - At risk (e.g., suspected self-neglect, abuse);

  - Rapidly evolving cognitive or behavioural problems (over weeks);

  - Significant care-giver burden (i.e. to avoid admission);

  - Suspected young onset dementia (YOD). Assessment of people with suspected YOD may be considered higher priority if their current employment is in jeopardy or they are at risk of financial exploitation or losing secure accommodation

  - Possible delirium, where telephone screen could be helpful.

Verbal discussion with the referring GP/ medical practitioner/referrer is recommended to support the triaging process.

- Many questions may be able to be resolved via secondary consultation rather than face to face assessment

Assessments conducted during the period of COVID-19 restrictions focus on symptom urgency and the development of strategies to manage the symptoms rather than on the establishment of a firm diagnosis. Capacity assessments may be considered higher priority if the person is at immediate risk (i.e. unable to manage complex health needs which may necessitate medical admission, imminent risk of loss of secure housing, financial exploitation, physical/emotional abuse).

Clients may need to be re-contacted for a more comprehensive diagnostic or multidisciplinary assessment after COVID-19 restrictions are lifted.

Utilising remote assessment measures where caregivers, family members or other loved ones living with or caring for a person with dementia can respond to specific questions that will provide an objective account of change in physical health, daily life activities, cognition, behaviour, neuropsychiatric condition, and social engagements

RESPONSE TO OTHER CLINICAL SERVICES

Adaptations to a variety of other clinical services have been made as follows:

- **Follow-up assessments:** These can be continued via telephone or telehealth whilst Memory Clinic staff are available

- **Medication reviews:** Most clinicians have transitioned to medication reviews via telephone or telehealth, which can continue whilst Memory Clinic staff are available.

- **Driving assessments:** Given spatial/social distancing, there is less reason for people to be on the road. However, older people may be more isolated due to lack of family visits etc., and therefore may still drive. While initial discussions about driving can be made via telephone or web-based telehealth, OT's have generally stopped assessments and online driving tests are suspended. It is suggested that if there is any reason for concern, clinicians should advise clients to cease driving until an assessment can be arranged. Referral to the state driving authority should continue to be sent in a timely manner, to ensure a timely review by the driving authority.

- **Residential facilities:** Concerns were raised about social isolation in residential facilities. Memory clinic staff may need to liaise with residential facilities to provide advice and encourage them to use technology to enable family interactions and prevent social isolation. Staff in residential care facilities may require consultation from memory clinics to assist them in providing practical emotional and behavioural support to distressed residents with cognitive limitations. Memory clinics are well suited to provide appropriate resources/fact sheets regarding COVID-19 for people with cognitive impairment.

ADVICE FOR CONTINUED FACE-TO-FACE SERVICES

In general, the advice of the local health department should be followed, wherever possible, and it is noted that this advice is changing rapidly. Some measures that have already been undertaken in Memory Clinics to protect the health of clients and staff include:

- Temperature measured upon arrival

- Adherence to physical distancing requirements in assessment room, including 1.5 metres distance between the clinician and the client.

- Keep face-to-face contact brief, to allow necessary assessment and consider remainder of assessment via phone or telehealth.

- Adherence to PPE guidelines as outlined by the federal Department of Health (DoH) and Health Service.

- If the client is COVID positive, NO face-to-face contact is recommended until they test negative. If the client must be seen, appropriate PPE must be worn and health guidelines adhered to with face-to -face contact ideally less than 15 minutes duration.

- Reduced staff to ensure social distancing.

- Regular disinfection of surfaces and test materials using appropriate disinfectant

- Cover mouth and nose when cough and sneeze

- Do not touch face or mouth

- Adherence to hand hygiene. Soap and water or hand wash is more effective than hand sanitizer alone. Hands should be washed for a minimum of 20 seconds under running water and dried with a disposable paper towel, in accordance with the DoH guidelines.

- Translated dementia-friendly information on COVID-19 could be useful

  - Victorian Health Department published resources in different languages:
    https://www.dhhs.vic.gov.au/translated-resources-coronavirus-disease-covid-19

  - WA Health Department
    https://www.wa.gov.au/organisation/department-of-the-premier-and-cabinet/covid-19-coronavirus-advice-other-languages

- Department of Health's "infection control training" for health care workers might be useful for staff still assessing clients in face-to-face meetings

  https://www.health.gov.au/resources/apps-and-tools/covid-19-infection-control-training

TELEHEALTH

There are a number of platforms available for telehealth services and clinicians should check with their local health services regarding which ones are endorsed. Ideally, platforms should meet the security and privacy standards of the Department of Health and the Privacy Act 1988.

Examples:

- Videocall via "Healthdirect" most preferred option at CDAMS clinics – this has good data security and easy to use
- Zoom for Healthcare
- Doxy.me
- Skype for business – accepted by some service providers (e.g., NSW Health)
- PEXIP (e.g., recommended by NSW Health)

It is noted that there have been some data security issues raised regarding *Zoom* or *MS Teams* and so these may not be accepted by health care services. In the short term, it might be possible to use these platforms if more secure options are not available. *However, you will need to check with your **health service if you have approval to use these platforms.*** However, clients would need to be advised about data security concerns and clinicians should check with management regarding their choice

It is noted that during COVID-19, there is less access to family members for corroborative histories. This could be alleviated by inviting family members to part of the interview or seeking consent to contact family members individually.

It is important that any telehealth service is tested with clients beforehand, and to specify phone details, the physical address of the person when they are receiving the consult and an email address as a back-up plan. In addition to feasibility and logistics, clinicians should ensure they have received training on best practice, privacy/confidentiality, ethics and record keeping. General guidelines for the use of Telehealth services for clinicians and clients can be found in a separate document we developed
https://www.australiandementianetwork.org.au/2020/04/17/covid19-using-telehealth-for-memory-clinic-consultations-advice-sheet/.

Where there is difficulty accessing or utilizing telehealth, telephone should be the default.

COGNITIVE ASSESSMENT VIA TELEHEALTH

Many clinicians are seeking solutions for either telephone based or web/video-based telehealth cognitive assessments. There are a number of options:

<u>**Basic screening tools**</u>

Telephone:

In general, cognitive screening tools may lack sensitivity for dementia especially in highly educated individuals. However, for the general population, some telephone-based assessments can provide useful cut-scores for dementia.

- Telephone Interview for Cognitive Status (TICS): The TICS-M has been examined in the Australian population and includes a delayed recall memory component. Norms are available from the CHEBA website: https://cheba.unsw.edu.au/research-groups/neuropsychology

- The full TICS may require a license but may also be useful and has shown to have equivalency scores with MMSE. https://www.parinc.com/Products/Pkey/445.

- Telephone MoCA: MoCA copyright owners have advised that people could utilise the MoCA without visual elements. This is scored out of 22 and has a cut off of ≥18. Note also that the blind version (Mini-MoCA) could be used and takes ~5mins to administer. This is scored out of 15 with scores ≥ 11 considered 'normal'. This can be downloaded from the MoCA website. https://www.mocatest.org/ Note that the MoCA has also been translated into many languages and can be used for clients with a culturally and linguistically diverse background. Note that training for the MoCA is now required for health professionals (neuropsychologists an exception).

- Other telephone options are available and have been reviewed elsewhere, see: Castanho et al (2014): Telephone-based screening tools for mild cognitive impairment and dementia in aging studies: a review of validated instruments. *Frontiers in Aging Neuroscience*, 6. DOI=10.3389/fnagi.2014.00016. URL=https://www.frontiersin.org/article/10.3389/fnagi.2014.00016.

Video conferencing:

- Audio-visual (web-based telehealth options). MoCA copyright owners have also suggested the MoCA can be adapted. Instructions are provided in Appendix 1 and via this link: https://mailchi.mp/mocatest/remote-moca-testing?e=e2e6093124.

- App-based tests may not be suitable if the client is required to download and administer it, though this potentially could be done with guidance.
    - There is also an app available for the MoCA
    - The mobile ACE-III is currently under maintenance. The paper-pencil-version can be downloaded from the FRONTIER website (https://www.sydney.edu.au/brain-mind/resources-for-clinicians/dementia-test.html) – no specific instructions for the administration via audio-visual based telehealth.
    - The Neuropsychiatry Unit Cognitive Screen (NUCOG). The NUCOG is free on iPad or you can purchase test forms. Certain tasks are more difficult via videoconference, including left/right orientation and discrimination to check for neglect.

- Clients with a culturally and linguistically diverse (CALD) background: the RUDAS has been proven to be a reliable screening tool when administered via videoconference, see: https://journals.sagepub.com/doi/full/10.1258/jtt.2012.SFT113

- Aboriginal and Torres Strait Islander (ATSI) clients: The KICA-Cog has not been formally adapted or investigated for its reliability in telehealth use BUT with simple adaptions it can be used (Kate Smith, Dina LoGiudice, personal communication 08.04.2020)
    - Hiding objects recall task: use current adaption for poor vision and name objects that the client needs to remember.
    - Praxis task: may be left out or can be conducted if client has the required common objects at home.
    - KICA Screen (short version of KICA-Cog) can be used via telehealth with no adaptions required.

NEUROPSYCHOLOGICAL TESTING VIA TELEHEALTH

Telephone interviews are more limited than telehealth videoconferencing for formal neuropsychological assessments. Visual resources cannot be shared via telephone and it cannot be guaranteed that for auditory memory tests, results are not being written down. However, some auditory tests could be administered and neuropsychologists could also draw on qualitative interview experience to provide insights.

Many models of teleneuropsychology assessment show good feasibility, reliability and validity, and that such services are well accepted by clients. Some more extensive models of teleneuropsychology assessment have utilized remote testing sites where there are trained facilitators that give test materials to clients under a neuropsychologist's guidance. However, these are not necessarily options during COVID-19. It is prohibited to send copyrighted test forms out to clients, under any circumstances, and telephone options are more limited than video conferencing options. Despite certain limitations, there are **many tests that can be used via a telehealth platform.** Many test companies have made modifications to standard test administration permissible during the COVID-19 pandemic. As an example, please see Pearson letter of no objection for guidelines.
http://www.pearsonclinical.com.au/filemanager/uploads/Letter-of-no-objection.pdf

Table 1 lists some examples of tests that have been formally validated for face-to-face and telehealth use with people over 55years (cognitive normal, MCI, mild/moderate dementia; see Brearly et al., 2017 for a review) and test instruments that have not been formally validated yet, but have been successfully used via telehealth in the target population (e.g., anecdotal evidence from clinical practice and research work).

We acknowledge that there might be additional test instruments that can be used when conducting teleneuropsychology assessments in the COVID-19 era (e.g., tests that do not require extensive material). It is up to the individual clinician to make sure they administer the tests in an ethical, reliable, valid and secure fashion and that they do not breach copyright guidelines.

Note: Precautions need to be made with the test interpretation for all tests that have not been formally validated. Diagnostic opinion is withheld if there are concerns regarding the validity of the assessment.

Table 1: NEUROPSYCHOLOGY TEST LIST OPTIONS

Domain tested	Neuropsychological Test	
	Validated for telehealth	**Not formally validated** but have been successfully used via telehealth in MCI and Dementia populations
Screening tools	Rowland Universal Dementia Assessment Scale (RUDAS) *(Wong et al., 2012)* Mini Mental State Examination (MMSE) *(small discrepancies observed in videoconferencing settings e.g., Brearly, et al., 2017)*	Addenbrooke's Cognitive Examination III (ACE-III) Montreal Cognitive Assessment for Dementia (MoCA) / new adapted version for audio-visual conference (see Appendix 1) Kimberley Cognitive Assessment – KICA-Cog (with restrictions mentioned above) KICA-Screen Neuropsychiatry Cognitive Examination (NUCOG)
Repeatable Batteries	Repeatable Battery for the Assessment of Neuropsychological Status (RBANS) *(Galusha-Glasscock et al., 2016)*	
Premorbid Functioning	WAIS-III: Vocabulary *(Hildebrand et al., 2004)*	Wechsler Test of Adult Reading (WTAR) Test of Premorbid Function (TOPF) National Adult Reading Test (NART)
Orientation		WMS-III Orientation
Attention and Working Memory	Digit Span Forwards and Backwards *(e.g., Cullum et al., 2014)*	WMS-III Mental Control WAIS-IV Arithmetic
Speed of Processing		Symbol Digit Modalities Test – Oral and Written
Memory	RAVLT *(e.g., Hildebrand et al., 2004)* HVLT-R *(e.g., Cullum et al., 2014)*	CVLT: Short and Long Forms WMS-IV: Logical Memory I & II Rey Complex Figure: 3' & 30" Recall
Speech and Language	Boston Naming Test (e.g., Cullum et al., 2006, Brearly, et al., 2017) Category Fluency (e.g., Cullum et al., 2006 [fruits, vegetables]; Cullum et al., 2014 [animals])	Sydney Language Battery Cookie Theft Picture
Visuospatial Functioning	Clock Drawing (small discrepancy observed in videoconference settings, e.g., *Cullum et al., 2014, Brearly, et al., 2017*) WAIS-III Matrix Reasoning (e.g., *Hildebrand et al., 2004)*	Simple Copy Rey Complex Figure Copy
Executive Functioning	Oral Trails *(Wadsworth et al., 2016)* Letter Fluency/COWAT *(e.g., Cullum et al., 2014 [FAS])*	WAIS-IV: Comprehension and Similarities Haylings Sentence Completion Test

Not possible for at home assessment without an assistant: Block Design

For further references on Telehealth and neuropsychology testing see *Cullum et al. (2014), JINS; Gallusha-Glasscock et al. (2016) Arch Clin Neuropsy; Wadsworth et al. (2016), Arch Clin Neuropsy; Brearly et al. (2017).*

Note: Psychologists delivering telepsychology services must apply the same ethical and professional standards of care and professional practice that are required when providing in-person psychological services. They must seek informed consent that specifically addresses

concerns pertaining to telehealth services and must make reasonable efforts to protect the confidentiality of the data and information relating to their clients and inform them of any potential risks of loss of confidentiality. The Australian Psychological Society will shortly release full guidelines on this topic.

For all neuropsychological assessments it is advised that:

- The client/family are called prior to the assessment to check on their current needs during the COVID-19 pandemic
- The client is given the option as to whether they would like to proceed with a telehealth assessment, with an explanation of the other potential referral options
- Telephone screening is conducted prior to check for client suitability
- An explanation regarding the purpose of the assessment is given to the client/family/service provider with appropriate verbal/written pre-briefing
- Verbal and written consent is obtained prior, with explanation of confidentiality, constraints and potential risks using a telehealth medium
- The client has access to suitable technology and a stable internet connection
- The client has access to a quiet and confidential space in the home environment
- The client has access to a family member to assist if required, and this person is educated about their role in the assessment process
- The phone number, email address and physical address of the client is obtained prior to the telehealth assessment
- The clinician has familiarity and competence with the telehealth platform
- The clinician receives appropriate supervision if they are conducting diagnostic assessments via telehealth
- Consideration is given to use permissible online stimulus books when they become available, such as those available through Pearson's Q-Global platform
- Non-copyrighted test forms should be sent out in a sealed envelope with explicit wording that the envelope should not be opened until the Psychologist instructs them to do so
- Non-copyrighted forms should be returned via pre-paid registered post
- Another alternative for non-copyrighted forms is that a screenshot is taken by the examiner and the document is witnessed to be shredded by the client
- Copyrighted forms and materials are not to be sent out
- De-briefing is conducted post-assessment with appropriate follow-up and feedback planned.
- Reporting of findings should describe that the assessment was conducted via videoconference and outline any issues that may compromise validity of test findings
- Appropriate caution in interpreting test findings should be clearly stated
- Other qualitative information, assessments and investigations can be used to guide clinical opinion

COGNITIVE REHABILITATION

The *British Psychological Society Division of Neuropsychology* recently (April 2020) concluded that there is preliminary evidence that cognitive rehabilitation interventions can be delivered using a telehealth approach. Some resources already exist in the Acquired Brain Injury area that could be utilized and/or adapted (contact Dr Dana Wong, E: D.Wong@latrobe.edu.au). In addition, there is a web-based research program at the University of Sydney seeking to evaluate the utility of an online Healthy Brain Ageing Program (contact: Haley.LaMonica@sydney.edu.au and see Appendix 2.

ONGOING SUPPORT FOR CLIENTS AND CARERS

COUNSELLING

There is a need to provide counselling for carers and clients with dementia during COVID-19 via phone. There is a real risk of increased anxiety and isolation at this time. Dementia Australia has extended its support and counselling services for the time of the COVID-19 pandemic. Many carer support groups will continue to run via videoconferencing platforms.

- All clinicians are strongly encouraged to refer their clients to the Dementia Australia service, if more support is needed: **National Dementia Helpline 1800 100 500.** Specific information on Dementia Australia's COVID-19 response and all available services can be found here - https://www.australiandementianetwork.org.au/wp-content/uploads/2020/04/Embedded-Perspective-paper_DA-services-during-COVID-19_April2020.pdf

- Dementia Australia have also compiled factsheets, available at https://www.dementia.org.au/an-update-from-dementia-australia

- Dementia Support Australia also published helpful factsheets and offers support services to clinicians as well as people with dementia and their carers: https://dementia.com.au/resources/library

For matters relating to meals, groceries and daily activities, clinicians are encouraged to refer to Community Health Service Packages.

Dementia Alliance International is an organisation that provides online (Zoom) peer support groups for people with dementia https://www.dementiaallianceinternational.org/services/online-support-groups/

DELIRIUM AND RISK MANAGEMENT PLAN

Provide counselling for carers and clients with dementia during COVID-19 via phone
Mail delirium information to the family after the telephone consultation

DEMENTIA-FRIENDLY COVID-19 INFORMATION

- Dementia Australia prepared some resources for people with dementia and carers https://www.dementia.org.au/media-releases/2020/dementia-help-sheets-to-navigate-coronavirus-covid-19

DEMENTIA FRIENDLY INTRODUCTION TO TECHNOLOGY USE

- American Recovery Connection and Prof Jamie Azios (Lafayette University, Louisiana) put together accessible step-by-step instructions for using Zoom

  - https://cloudstore.aarnet.edu.au/plus/s/2Jh6DHWl038N23h (mobile devices)

  - https://cloudstore.aarnet.edu.au/plus/s/nBES5KSbtt8ZmPZ (computer)

SUPPORT FOR MEMORY CLINIC STAFF

Clinicians might like to form a peer-support group with times allocated for peer-support in relation to COVID-19 and telehealth. We are currently in the process of setting this up and will publish the times on https://www.australiandementianetwork.org.au/memory-clinics-network/.

Webinars: Australian Psychological Society, British Psychological Society, American Psychological Society etc.

ACKNOWLEDGEMENTS

This perspectives paper was compiled via a meeting of national stakeholders and further email consultations. The group comprised:

1. **The steering committee of ADNeT Memory Clinics**
   Prof Sharon Naismith (Chair), Prof Perminder Sachdev (Co-Chair), Dr Inga Mehrani, Dr Nicole Kochan, Prof. Susan Kurrle, A/Prof Lee-Fay Low, Ms. Kaele Stokes (Dementia Australia), Ms. Deborah Remfry (ADNeT Consumer Representative)
2. **National stakeholders**
   - Neurology: *Dr Jane Alty (TAS), A/Prof Rebekah Ahmed (NSW)*
   - Psychology: *Dr Leander Mitchell (QLD), Dr Wendy Kelso (VIC), Dr Kate Smith (WA)*
   - Geriatrics: *Dr Shirantha Adikah (QLD)*
   - *Psychiatry: Dr Sarah Farrand (VIC)*
   - Occupational Therapy: *Ms Elizabeth Rand (VIC)*
   - Nursing: *Ms Judy Deimel (SA), Ms Therese Woodward (NSW)*
   - Neuroscience: *Dr Hamid Sohrabi (WA)*
   - Speech Pathology: *Kym Torresi (VIC)*
   - Rehabilitation Physician: *Prof Maria Crotty*

Support with the preparation of Appendix documents was provided by *Ms Katrina Fyfe, ADNeT-Memory Clinics (WA)*.

Support with the preparation of this documents for publication on the ADNeT website and other channels was provided by *Ms Amanda Place (ADNeT-communications)*.

Disclaimer: This perspectives paper is intended to be an approximate guide for clinicians working in the field and is not intended to replace any advice given by local Health districts or government departments on management of patients during Covid-19.

APPENDIX 1 - MOCA ADAPTATIONS

See: https://mailchi.mp/mocatest/remote-moca-testing?e=e2e6093124

VALIDATION STUDIES:

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- Search articles by 'Daniel K Horton'A Validation Study of the Remotely Administered Montreal Cognitive Assessment Tool in the Elderly Japanese Population. Iiboshi K, Yoshida K, Yamaoka Y, Eguchi Y, Sato D, Kishimoto M, Funaki K, Mimura M, Kishimoto T. Telemed J E Health. 2019 Nov 19. doi: 10.1089/tmj.2019.0134.
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- The reliability of the Montreal Cognitive Assessment using telehealth in a rural setting with veterans Nathaniel DeYoung, Brian V Shenal. First Published January 10, 2018.

Dear Colleagues

I hope you are doing well in the midst of this important Covid-19 Pandemic.

We have received a lot of requests to use a remote version of the MoCA to assess patients' cognition for clinical or research purposes. Here are a few options that have been validated to use for remote testing:

Abbreviated Telephone Versions

1. MoCA without the visual elements, scored out of 22. Cut-off: N ≥ 19
   You can download the **Blind version of the MoCA** from our website and administer it over the phone. Pendlebury et al. Stroke. 2013; 44:227-229.
2. Mini/5min MoCA Hong Kong version. 30 points. Wong et al. Stroke. 2015; 46(4): 1059–1064. Will be posted on the website shortly.
3. Mini/5min MoCA. Montreal version 15 points. Cut-off N ≥ 11. Nasreddine et al. Validated but not published yet. Test and Instructions will be posted on the website shortly as well as the initial validation results comparing the 5 min version to the full version.

Full MoCA via Audio-Visual Conference

Full version can be administered via Skype, Face Time, or Teleconference.

The rater proceeds as follows.

Identify yourself, from which clinic/institution and in which city you are located.

Tell the subject the purpose of your call, obtain their verbal consent to proceed and instruct them to get a white sheet of paper, a pencil and an eraser, and to isolate themselves in a quiet room. The rater shows the patient the visual section of the MoCA-See below (First 8 points)

Trails: Show them the Trail and say: *"Please **tell me** where the arrow should go next to respect the pattern I am showing you"*
Cube: Show them the cube and say: *"Copy the cube"*
Clock: *"Draw a clock. Put in all the numbers and set the time to 10 past 11."*
Animal naming: *"Tell me the name of these animals."*
The rest of the test is done the same way as in the clinic except for the Orientation:
Date: *"Look straight at the camera and tell me today's date, day of the week, month and year"*
Place: *"From what Clinic/Institution I am calling you from"*
City: *"What is the city in which our Clinic/institution is located?"*

APPENDIX 2 - ONLINE COGNITIVE REHABILITATION

Have you noticed changes in your memory or thinking skills?
Do you want to improve your cognition and wellbeing?

This research study will evaluate the effectiveness of a 6-week, <u>online</u> education and cognitive training program, for improving memory and other thinking skills as well as general wellbeing (e.g. mood, quality of life, etc.). The program is designed for people over 50 years with mild cognitive difficulties.

In order to participate, you will need to:
- ✓ Be aged 50 years or older;
- ✓ Complete a brief background interview and assessment of your memory and thinking skills <u>over the phone</u>;
- ✓ Have access to a computer with a consistent Internet connection;
- ✓ Be willing to complete a series of <u>online</u> education/cognitive training sessions (each taking approximately one hour) twice weekly for 6 weeks;
- ✓ Complete <u>online</u> questionnaires regarding your health and wellbeing before and after the training program;
- ✓ Complete a brief <u>online</u> cognitive assessment before and after the training program.

This study is being conducted by Dr Haley LaMonica and Dr Loren Mowszowski, who are part of the Healthy Brain Ageing Research Program, Brain and Mind Centre, The University of Sydney.

If you are interested in participating or would like more information, please email our study team at hba.cognet@sydney.edu.au