assessment of cognition primarily consists of traditional measures “shoe horned” into a video modality for screening purposes, and not likely to replace more extensive in-person assessment. Yet, the healthcare professionals privileged with providing care to older adults may increasingly be called on to provide telemedicine-based services in the future. Increased competence in technology-mediated healthcare and the construction of telehealth-based cognitive measures will likely become imperative moving forward. Future research designing cognitive measures that utilize and embrace the strengths of telehealth will become vital within the changing landscape of our healthcare systems.

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REFERENCES

1. Breary TW, Shura RD, Martindale SL, et al. Neuropsychological test administration: a videoconference: a systematic review and meta-analysis. Neuropsychol Rev. 2017;27(2):174-186.
2. Munro Cullum C, Hyman LS, Grosch M, Parikh M, Weiner MF. Teleneuropsychology: evidence for video teleconference-based neuropsychological assessment. J Int Neuropsychol Soc. 2014;20(10):1028-1033.
3. Wadsworth HE, Dhima K, Womack KB, et al. Validity of teleneuropysychological assessment in older patients with cognitive disorders. Arch Clin Neuropsychol. 2018;33(8):1040-1045.
4. Loh PK, Donaldson M, Flicker L, Maher S, Goldswain P. Development of a telemedicine protocol for the diagnosis of Alzheimer’s disease. J Telemed Telecare. 2007;13(2):90-94.
5. Lindauer A, Seelye A, Lyons B, et al. Dementia care comes home: patient and caregiver assessment via telemedicine. Gerontologist. 2017;57(5):e85-e93.
6. Wittich W, Phillips N, Nasrreddine ZS, Chertkow H. Sensitivity and specificity of the Montreal Cognitive Assessment modified for individuals who are visually impaired. J Vis Impair Blindness. 2010;104(6):360-368.
7. Brandy J, Spencer M, Folstein M. The telephone interview for cognitive status. Neuropsychiatr Neuropsychol Behav Neurol. 1998;1:111-117.
8. Kliegel M, Martin M, Jager T. Development and validation of the Cognitive Telephone Screening Instrument (COGTEL) for the assessment of cognitive function across adulthood. J Psychol. 2007;141(2):147-170.
9. Lachman ME, Agrigoroaei S, Tun PA, Weaver SL. Monitoring cognitive functioning: psychometric properties of the brief test of adult cognition by telephone. Assessment. 2014;21(4):404-417.
10. Pendlebury ST, Welch SJ, Cuthbertson FC, Mair J, Mehta Z, Rothwell PM. Telephone assessment of cognition after transient ischemic attack and stroke: Modified telephone interview of cognitive status and telephone Montreal Cognitive Assessment versus face-to-face Montreal Cognitive Assessment and neuropsychological battery. Stroke. 2013;44(1):227-229.

First Impressions of Performing Bedside Cognitive Assessment of COVID-19 Inpatients

To the Editor: Natalie Phillips and colleagues very helpfully outline some of the challenges encountered when performing cognitive screening via telemedicine. The authors focus in particular on the use of the Montreal Cognitive Assessment and the significant obstacles encountered during nonstandardized remote administration of the test. I outline here some of the challenges encountered when performing bedside cognitive assessment of coronavirus disease 2019 (COVID-19) inpatients with acquired brain injury, degenerative conditions, or other neurologic diagnoses.

1. Wearing personal protective equipment (PPE) poses several logistical challenges for performing bedside cognitive assessment. For example, paper-and-pencil tasks cannot be taken into the ward for use during the assessment. For timed tasks, even where permissible to wear a wristwatch, these cannot be seen underneath the PPE. Furthermore, ward wall-mounted clocks may not always be visible for timed tasks.

2. Perceptual problems are accentuated by wearing PPE. Speaking through a mask to patients who might have processing or hearing impairment as part of acquired brain injury or other neurologic insult makes bedside cognitive assessment difficult to perform with assured reliability and validity. Conversely, wearing PPE is uncomfortable and hot, and it can make it difficult to observe your patient’s performance as well as you would like.

3. Factors related to COVID-19 itself can influence the findings of bedside cognitive assessment. Patients with
COVID-19 often experience debilitating fatigue that may adversely affect their cognitive performance. Patients may only be able to tolerate short bedside cognitive screening. It can be difficult to disentangle what accounts for observed underperformance: COVID-19–associated symptoms such as fatigue, brain injury/other neurologic factors, or both.

4. Psychological factors can affect the bedside cognitive assessment and its findings. COVID-19 is a frightening new disease that has caused severe global disruption. When seeing ward-based inpatients with COVID-19, anxiety can influence the reliability and validity of their performance. Patients’ anxiety can be further accentuated by the challenges associated with wearing PPE that can hinder the clinician in creating a reassuring and calm environment within which to assess patients.

5. The consultation per patient takes more time. Changing into surgical scrubs, fitting and removal of PPE, and showering upon leaving the ward is time consuming. As a result, fewer patients can be assessed during each ward visit than would normally be the case. These COVID-19 infection control measures also prevent note taking to serve as a memory aid of patients’ cognitive presentation because taking paper notes from a COVID-19 ward for later dictation would pose a contamination risk, reducing the efficiency and increasing the time required for performing cognitive screening of ward patients.

COVID-19 poses many challenges to the care of patients with suspected or confirmed cognitive impairment or neurologic and neuropsychological problems. During the COVID-19 crisis, clinicians will continue to receive referrals requesting cognitive assessment of these patients, to help inform their ongoing care. However, some adaptations to practice are most likely needed. Performing cognitive assessment of inpatients under the restrictive conditions imposed by COVID-19 requires a flexible approach without the normal assessment tools at our disposal. Accordingly, an awareness of issues pertaining to reliability, validity, and interpretation of results under these circumstances is crucial as well. Allowing extra time for consultations and managing clinician fatigue is important. Clinicians should assess for noncognitive factors, in particular anxiety, as well as fatigue. Despite these challenges, patients should not be deprived of clinical assessments that could have important implications for their post–COVID-19 care and rehabilitation.

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REFERENCES

1. Phillips NA, Chertkow H, Pichora-Fuller MK, Wittich W. Special issues on using the Montreal Cognitive Assessment for telemedicine assessment during COVID-19. J Am Geriatr Soc. 2020;68(5):942-944. https://doi.org/10.1111/jgs.16469.
2. Nasreddine ZS, Phillips NA, Bedirian V, et al. The Montreal Cognitive Assessment, MoCA: a brief screening tool for mild cognitive impairment. J Am Geriatr Soc. 2005;53(4):695-699.

Clinical Judgment Is Paramount When Performing Cognitive Screening during COVID-19

To the Editor: Rudi Coetzer1 has provided thoughtful first impressions on the nonstandardized use of the Montreal Cognitive Assessment (MoCA)2 with inpatients during the 2019 coronavirus disease (COVID-19) pandemic. Our goal is to continue a dialogue on how to engage in best practices for bedside and/or emergency department cognitive screening under these challenging conditions. Our take-home message is that cognitive assessment is as much a process as an outcome.

Both Dr. Coetzer’s and our experience shows that current hospital environments are often noisy, with space and time pressures. The use of personal protective equipment (PPE) may degrade sensory cues to communication. COVID-19 disproportionately affects frail and vulnerable people and may exacerbate sleep deprivation and increase delirium. These factors can compound and likely affect cognitive performance itself and cognitive testing procedures and interpretation.

1. Wearing PPE while performing bedside cognitive assessment poses several logistical challenges for the assessor in terms of materials and time. Coetzer’s letter illustrates that it is presently not “business as usual,” and some clinical environments are more restrictive than others. Our own strategies have included using a smartphone or tablet inside a transparent bag to administer clock-drawing tests (through a whiteboard app), photograph results, and dictate clinical notes. Timing MoCA subtests may be approximated through silent counting. The methods will differ and need to be carefully considered. In any nonstandard situation, it will be the clinician’s observations of the patient’s performance rather than the score per se that will inform the clinical picture.

2. Perceptual problems are accentuated by wearing PPE. Opaque masks may reduce speech intelligibility, both

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