

# Philip St. John MD MPH CCFP FRCPC

Section of Geriatric Medicine, University of Manitoba, Centre on Aging, University of Manitoba, Winnipeg Regional Health Authority

# Theresa Bowser RN

Winnipeg Regional Health Authority

# Laurel Rose OT Rea

Winnipeg Regional Health Authority

# **Corresponding Author:**

Dr. Phil St. John pstjohn@hsc.mb.ca

# HOME-BASED COMPREHENSIVE GERIATRIC ASSESSMENT IN THE COVID19 ERA – CHALLENGES AND ADAPTATIONS

#### **Abstract**

Home-based Comprehensive Geriatric Assessment (CGA) has been shown to reduce the risk of functional decline, hospitalization and longterm care utilization. These home-based assessments emphasize human interaction with extended contact times between care providers and older adults, which could increase the risk of viral transmission. In response to this, the Geriatric Programme Assessment Teams (GPATs) within the Winnipeg Regional Health Authority adapted CGA to be done remotely or to provide more focused CGA. Challenges encountered include difficulty contacting the client, establishing rapport, assessing the environment, gathering information, assessing functional status and assessing cognition. The time required for the CGA also increased, and more contacts were required. Adaptation, patience, persistence and flexibility were required. To some extent, the pandemic provided alternatives to usual care while at the same time reinforcing the importance of human interaction in care provision. As the pandemic progresses, home visiting models will continue to evolve to meet the rapidly changing context.

This article has been peer reviewed.

Conflict of Interest: Dr. St. John is an independent contractor with the Winnipeg Regional Health Authority, and Ms. Bowser and Ms. Rose are both employees of the Winnipeg Regional Health Authority. All three are directly involved in clinical care and/or administration of the Geriatric Programme Assessment Teams for which they are remunerated.

This article was published in November 2020.

COVID-19, home visits, geriatric outreach

# **Background**

Home visits have long been important in primary care<sup>1,2</sup>. Home-based Comprehensive Geriatric Assessment (CGA) also has a long history, and there is evidence for improved outcomes compared to usual care – lower hospitalization rates, lower rates of functional decline and lower use of long-term care. Assessments which are multidimensional – with cognitive, functional, medical, psychological and social assessments – appear to be the most beneficial<sup>3</sup>. To learn more <u>see</u>.

Seeing, listening to and examining the older adult is the cornerstone of CGA. Indeed, the central component of the intervention is direct human interaction. Clinical interactions, including the physical examination, are highly valued by both the client and by most clinicians<sup>4</sup>. However, these assessments require extended contact with the older adult, usually in an indoor setting, and often in a congregate living environment such as an assisted living or congregate residential setting. These prolonged assessments may provide an opportunity for viral transmission, with resulting severe infection and adverse outcomes for the older adult, other people in the residential setting and the health care provider. In most jurisdictions during the Covid-19 pandemic, home visits were therefore limited, in some cases suspended entirely, and in other cases, greatly abbreviated.

Home-based CGA has been provided in Winnipeg since 1999. There are currently six geographically based outreach teams Geriatric Programme Assessment Teams (GPATs) in the Winnipeg Regional Health Authority (WRHA). The GPAT teams are integrated into the overall clinical programme, which includes inpatient geriatric assessment and rehabilitation units in three hospitals, five Geriatric Day Hospitals (one administratively under the Primary Care Programme) and inpatient consult services at all acute and subacute hospitals. More than 2000 referrals are received by the GPAT teams each year. The main sources of referral are primary care providers, home care and hospitals (from the emergency room and for post-discharge follow-up.) Other sources of referral include the general community (including friends, family and neighbours) and community services (community-based therapy, police, emergency responders and homeless shelters). The assessments are in multiple domains - medical, cognitive, function, psychological and social. Prior to the Covid-19 pandemic, there was usually a discussion with the referring source, a telephone interview, a health record review, a conversation with appropriate sources of collateral information and an in-person assessment. This in-person assessment usually consisted of a full history and physical examination, which included standardized measures of health. These measures included postural vital signs, a timed up and go (TUG)<sup>5</sup>, a standardized measure of functional status, the Folstein Mini-Mental State Examination<sup>6</sup> and/or the Montreal Cognitive Assessment (MoCA)<sup>7</sup>, the Geriatric Depression Scale<sup>8</sup> in some cases, and a subjective measure of the state of housing. As well, a measure of caregiver stress was done in appropriate settings. The overall direct contact time was usually more than 90 minutes.

With the advent of Covid-19, the assessment process changed. First, the number of consults received fell dramatically as fewer older adults attended emergency departments and primary care offices. The number of consults received has since recovered. Second, as many assessments as possible were conducted remotely without direct contact. This was usually via a telephone assessment, but occasionally via teleconference software. As many of the standardized measures as possible were used. Instead of the MMSE, the telephone interview of cognition (TICS)<sup>9</sup> or MoCA-Blind<sup>10</sup> was usually used, although there was considerable experimentation with other measures of cognition ( to learn more regarding virtual cognitive testing see). Third, when in-person assessments were deemed safe and necessary, the assessment process was streamlined as much as possible and tailored to the individual. For instance, if the primary reason for assessment was for serious falls, only postural vitals, vision, the TUG and the physical environment were assessed in person. The remainder of the assessment was done by phone or video. Fourth, assessments for follow-up of a recent hospital or emergency department admission were greatly abbreviated. Finally, non- urgent referrals were deferred to

a later date or re-directed to another service where appropriate. All assessments were done using personal protective equipment (PPE) and socially distanced to the greatest extent possible.

We report our experiences with this process. To the best of our knowledge, there were no cases of Covid-19 transmitted by these assessments. Winnipeg to date has had a very low incidence of Covid-19 cases and deaths. Most of the transmission was due to recent travel or contact with individuals with recent travel. There is currently an outbreak in the western and southern regions of Manitoba; in the first six months of the epidemic, cases in Winnipeg remained low.

As part of ongoing programme assessment, the GPAT team members were asked about their experience with these assessments and about suggestions for improvement. Some comments were volunteered. We collated these assessments and analyzed for emerging themes. These analyses received approval from the Research Ethics Board of the Bannatyne Campus of the University of Manitoba.

#### Results

The first challenge noted was communication and the loss of information. The most basic challenge was that some clients did not have telephones, and others did not hear the ring or answer the phone. This made establishing initial contact difficult. As well, non-verbal cues were noted to be important, both for the GPAT clinician and for the older adult. These non-verbal cues were impossible to note in remote assessments. Moreover, the role of silence was not clear without visual clues and silence during phone interviews was difficult for clinicians to interpret. It was easier to note if the client was thinking, distracted or nodding/shaking their head during in-person assessments. During remote assessments, silence was therefore non-informative. Communication was particularly problematic for those with English as an additional language, for those with hearing impairments and for those with advanced cognitive impairment. One clinician observed that non-verbal cues and environmental scans were usually >50% of the data collected and this was difficult to obtain without direct contact. Others noted that odours were not apparent over the phone. Even with in-person assessments, physical distancing and masks made communication even more difficult, particularly for those with hearing loss. To deal with this, patience was required, as well as making more use of non-verbal communication (i.e. written.)

A second major challenge was establishing rapport. This was very difficult with social distancing or by phone. Team members also felt that the shortened visits, together with the use of PPE, made it more difficult to get clients to engage with assessments than in the pre-Covid-19 era. A related issue raised by some clinicians was that some clients were already wary of assessments since they had numerous calls from telemarketers and from telephone scams. Establishing rapport during brief and/or virtual visits was not only an issue when interacting with clients, but also when interacting with sources of collateral information. Again, it was felt that patience and understanding were essential to establishing rapport.

A third challenge was assessing cognition. This was often assessed in the telephone component and was quite challenging. The use of PPE limited visual cues which could be distressing for those with cognitive impairment. Moreover, the use of PPE and social distancing could potentially worsen paranoia. While this had not yet been experienced, it remained a concern for the outreach team members.

A fourth challenge was functional assessment. Relying only upon self-report was felt to be problematic when it could not be verified by in-person observation. This was felt to be particularly problematic for remote-only assessments, but also in the truncated focused geriatric assessments. To address this, as thorough a collateral history as possible was felt to be important. Clinicians expressed concern that clients and caregivers may have normalized impairments of function or cognition over time, which decreased their reporting of these concerns.

Another challenge was time management. While the visits were truncated, they were often more difficult to arrange than in the pre-Covid-19 era. Some assessments required multiple contacts to obtain a complete assessment. It was particularly difficult to co-ordinate one or more long telephone calls as well as a shortened focused in-person assessment. Some clinicians reported that their contact with clients was more protracted on the telephone than in person. Clients and caregivers expressed isolation, a need for information and questions about Covid-19. Clinicians tried to limit the number of family members attending in-home assessments to reduce exposure and maintain social distancing. Families were largely cooperative but clinicians were put in challenging positions at times. In rare situations, there were large numbers of family in very confined spaces. This made some clinicians uncomfortable, and some were unsure how to adjust to this situation. Informal policies were subsequently adopted to deal with these rare situations.

A final major issue that was noted was that many team members felt that the assessments were less complete. The shortened assessments may have missed important issues that sometimes only become apparent with longer assessments. As well, some members noted that there could be a mismatch between what clients say and what is actually seen on the visit. Interactions between the client and their families/friends were also difficult to assess since the fragmented assessments were often only with individuals, not with the family unit. In virtual visits, or in truncated in-person visits, these important issues may not have come to the fore. No solutions were apparent for this issue.

# **Conclusions**

The advent of the Covid-19 pandemic has brought substantial challenges to home-based CGA. A balance between thorough assessments and safe assessments, which minimizes viral transmission, must be found. This may not be easy. Technical solutions may help mitigate some of the negative effects of social distancing, and focused in-person assessments may minimize direct contact time with clients. Ultimately, however, geriatric assessment relies on human interaction and contact. Seeing people in their own environment and listening to people are perhaps the most important aspects of caring for older people. As the pandemic evolves, we will need to do this in the safest possible way.

### **REFERENCES:**

- 1. Soh LL, Low LL. Attitudes, perceptions and practice patterns of primary care practitioners towards house calls. *J Prim Health Care*. 2018;10(3):237-247.
- 2. Andrew MK, Burge F, Marshall EG. Family doctors providing home visits in Nova Scotia: Who are they and how often does it happen? *Can Fam Physician*. 2020;66(4):275-280.
- 3. Stuck AE, Egger M, Hammer A, Minder CE, Beck JC. Home visits to prevent nursing home admission and functional decline in elderly people: systematic review and meta-regression analysis. *JAMA*. 2002; 287(8):1022-1028.
- 4. Hyman P. The Disappearance of the Primary Care Physical Examination—Losing Touch. *JAMA Intern Med.* 2020.
- 5. Podsiadlo D, Richardson S. The timed "Up & Go": a test of basic functional mobility for frail elderly persons. *J Am Geriatr Soc.* 1991;39(2):142-148.
- 6. Folstein MF, Folstein SE, McHugh PR. "Mini-mental state". A practical method for grading the cognitive state of patients for the clinician. *J Psychiatr Res.* 1975;12(3):189-198.
- Nasreddine ZS, Phillips NA, Bedirian V, et al. The Montreal Cognitive Assessment, MoCA: a brief screening tool for mild cognitive impairment. *JJ Am Geriatr Soc.* 2005;53(4):695-699.
- 8. Yesavage JA, Brink TL, Rose TL, et al. Development and validation of a geriatric depression screening scale: a preliminary report. *J Psychiatr Res.* 1982;17(1):37-49.
- 9. Brandt J, Spencer M, Folstein M. The telephone interview for cognitive status. *Neuropsychiatry Neuropsychol Behav Neurol.* 1988;1(2):111-117.
- 10. Wittich W, Phillips N, Nasreddine ZS, Chertkow H. Sensitivity and specificity of the Montreal Cognitive Assessment modified for individuals who are visually impaired. *J Vis Impair Blind*. 2010; 104(6): 360-368.