Leveraging Virtual Care Strategies in Delivery of Comprehensive Geriatric Assessment (CGA)

A Decision Tool Kit

Prepared by the Virtual Care Task Group

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Provincial Geriatrics Leadership Ontario

Contents

Preface

Evidence, Learning and Resources

Risk Analysis: Virtual vs. In-Person Visits

References

Task Group Members

Provincial Geriatrics Leadership Ontario

Provincial Geriatrics Leadership Ontario

Preface

Background:

Provincial Specialized Geriatric Leadership Ontario (PGLO) coordinates the provincial infrastructure for clinical geriatric care. In collaboration with health professionals providing direct care, PGLO provides trusted leadership to advance integrated, person-centred care for older adults and their caregivers living with complex health needs in Ontario. The PGLO focuses on coordinating perspectives across clinical geriatric services (Care of the Elderly, Geriatric Medicine, Geriatric Psychiatry and Interprofessional Geriatric Teams) in order to improve the care for older adults across the continuum of care.

As a result of the COVID-19 pandemic, there was a rapid shift to utilizing virtual modalities within Specialized Geriatric Services (SGS). In August 2020, members of the PGLO's SGS Administrators Committee struck a task group to develop a virtual care toolkit. This resource is the outcome of this task group's work.

Terminology:

For the purposes of this resource, the term virtual care refers to any direct patient/family interaction with a health care provider that is enabled through technology (e.g., Telephone and Audio-Video platforms such as, OTN, Zoom, Microsoft Teams, etc.). Where applicable, the specific modality cited in the evidence (telephone vs. video conference) is noted

Purpose and Use of this Resource:

The task group identified the need for evidence-based guidance to support clinical decision making regarding the use of virtual care strategies - specific to the domains of a Comprehensive Geriatric Assessment.

Decision making related to the use of virtual care, or what modality to use for a virtual visit, should take into consideration[1]:

- The unique circumstances of each patient
- Clinical Needs of the patient
- The appropriateness of virtual care for the clinical encounter

This resource aims to provide a structured approach to critical consideration of the above when determining the a best approach to a CGA, taking into account:

1) the available evidence and learning related to virtual assessment of the CGA domains, *as well as*
2) the potential positive and negative consequences that may result from both offering and not offering virtual CGA

What this Resource is not:

This resource does not provide guidance on the utility of different virtual care solutions or platforms, the process for obtaining informed consent for virtual care, optimizing the virtual care experience for older adults, or operationalizing virtual care work flow. A number of resources are available that do address these additional considerations. Some examples of these resources are included below:

- Tips for Senior Friendly Virtual Care & Recommendations for Senior Friendly Virtual Care, *Regional Geriatric Program of Toronto*. 2020
- Providing Virtual Care to Older Adults – A Guidance Document for Health Care and Community Support Services Providers, *South West Frail Senior Strategy*. 2020
- Virtual Care Solutions for Health Care Organizations, Primary Care and Specialized Care, *Ontario Telemedicine Network*
- Virtual Care Playbook, *Canadian Medical Association; The College of Family Physicians and Surgeons of Canada, The College of Family Physicians of Canada*. 2020

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Evidence & Recent Learning About Virtual CGA

CGA Assessment Domains	Interview/History/Info Gathering Priority Issues - Medical/Surgical History - Falls - Medications - Social History - Function - Continence - Nutrition - Pain - Sleep - Mood/Mental Health	Physical Assessment Function - Vitals - BP - vision - Hearing - Neuro - MSK - Cardiovascular - Resp - Gastro - Foot - Skin - Labs/Diagnostics

Available evidence & learning	• Virtual care can be appropriate to assess and treat mental health issues, many skin problems and urinary issues. [2]
	• Prioritize in-person clinical interview data over video-conferenced assessment data when completing a virtual Comprehensive Geriatric Assessment (CGA). [2]
	• Perceptual difficulties and slower internet speeds are correlated to lower cognitive test scores in video conference vs. in-person assessments. [3]
	• Virtual care models have proved feasible for: cognitive testing; diagnosis of dementia and depression; supporting the work of integrated and collaborative care models; and providing caregiver support. [4, 5]
	• Engaging caregivers to provide support and gather collateral information is an important component of a comprehensive geriatric assessment.6 Much of collateral information can be gathered via telephone. Detailed information from referral sources, patients, caregivers and other collateral sources will help form a comprehensive picture of the patient, and can help identify whether/how urgently an in-person assessment is required. [7]
	• A pre-appointment questionnaire can be utilized to support information gathering
	• Consider critically whether formal cognitive testing is required - formal testing may not be needed if the patient has been recently assessed.6 A cognitive screening score is only one of many elements considered in a CGA.8 Currently available evidence suggests scores for cognitive screening completed virtually need to be interpreted cautiously. [6]
	• Consider whether virtual care will improve access to and/or timeliness of assessment (remote/rural living older adults). Virtual assessment is preferrable compared to none or significantly delayed assessment. [9]
	• Leverage virtual strategies to improve processes and engagement (e.g., to gather history and explain care processes prior to in-person visits thus allowing additional in- person time to build rapport, or to engage multiple caregivers, ensuring common understanding of an older adult's needs and situations)
		• Home devices can be utilized to assess some conditions (e.g. Blood Pressure). [2]
		• Virtual care be used for assessments that do not require palpation or auscultation. [2]
		• Virtual care may not be appropriate for: [2, 10, 11, 12. 13]
		  ○ Patients experiencing new onset symptoms indicative of medical emergency (neurological symptoms, shortness of breath, chest pain)
		  ○ Sharing bad news or a significant diagnosis
		  ○ New prescriptions for narcotics, benzodiazepines, or stimulants
		  ○ Parkinson's Disease
		  ○ Undifferentiated acute problems or unstable mental health conditions
		  ○ Situations in which patient's may not be able to secure a private space in which to comfortably share confidential information
		  ○ Situations in which there are language barriers that could negatively impact the virtual visit
		• Virtual assessment of physical conditions may be appropriate for patients who have previously been seen face to face, and have already received the key pieces of physical examination.[10]
		• Physical Assessment via Video Conference: [14]
		  • General: Is the patient dressed appropriately? Distress / furrowed brow? Does the patient look unwell? Is the patient obese/appear very thin?
		  • Face & Neck: Facial symmetry, dentition, extraocular movement, hypomimia, neck mobility/range of motion
		  • Respiratory Status: Is the patient coughing and/or wheezing? Is the patient short of breath at rest, while talking? Is the patient using pursed lip breathing?
		  • Neurological Status: Hypokinesia, bradykinesia? Tremor? Bradyphrenia ?Hemiparesis ?Coordination? Rapid alternating movements
		  • MSK: Posture, Kyphosis, scoliosis, deformities, contractures? Functional range of motion
		  • Mobility: Seating, transfers, gait, stand on toes and heels? One-legged stance? Look at soles of shoes? Look at tops and bottoms of shoes for abnormal wear, pressure points
		  • Feet: Color/circulation, toenails, deformities? pressure points / wounds?
		  • Skin: Pressure sores – stage? Wounds/lesions? Bruising? Rash? Venous stasis changes?

Resources	2020 SH/CAMH GODSOE CHAIRS' LECTURE IN GERIATRICS, The Art of Virtual Care… The Keys of Effective TeleMedicine for Older Adults, IHI New Patient Questionnaire ; Telephone-based Screening for Mild Cognitive Impairment RGP Toronto Virtual Cognitive Assessment Tip Sheet	Virtual Comprehensive Geriatric Assessment, Bay Crest Virtual Arthritis Physical Assessment The Telehealth Ten: A Guide for a Patient-Assisted Virtual Physical Examination The Telemedicine Musculoskeletal Exam

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Risk Analysis of Virtual & In-Person CGA Consideration of Potential Harms and Benefits

As with any health care decision, choosing to provide virtual or in-person CGA will have consequences that range from positive to negative. These consequences may impact the patient and family, the clinician, the organization or health care system or all of the above. Some examples of the potential harms and benefits of both in-person and virtual care may include:

	Virtual Care	In-Person Care
Potential Harms	• Uncertain accuracy of standardized assessment results • May be confusing for some patients with cognitive decline • Unable to complete hands-on physical assessment • Lack of confidence/comfortability with virtual care for provider and/or patient • Equity concerns related to affordability of equipment/devices and internet service	• Longer wait times for some services; Cost & stress related to travel, parking, time off work • Increased risk of infection, especially during outbreaks (e.g., influenza, COVID-19) • Increased anxiety for some, due to associations with health care environments • Not accessible for all, e.g., rural or remote living and/or lack of access to transportation • Increased travel time for staff; decreased efficiency
Potential Benefits	• Quicker access to care; decreased stress related to travel, mobility risks • Reduced staff travel time – increased efficiencies • No cost associated with travel, parking, time off work • Decreased anxiety for some / more comfortable in home environment • Opportunity to include additional family/friend caregivers or health team members • Minimize risk of infection, especially during outbreaks (e.g., influenza, COVID-19)	• Ability to complete hands on assessment; Ability to observe patient • Standardized application of assessments • Increased provider confidence in assessment results/findings • Potential for enhanced rapport building

Decisions regarding the mode of care delivery should take into consideration the potential harms and benefits of both virtual and in-person approaches, according to each patient and family's unique circumstances and clinical needs. Often there will be competing harms and benefits associated with each.

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Risk Analysis of Virtual & In-Person CGA Consideration of Potential Harms and Benefits

When considering the consequences of offering virtual care to an individual patient or a group of patients, there are likely be potential benefits and potential harms associated with both modes of care delivery. A risk matrix can be a useful in weighing the relative impact of the potential harms associated with each. A risk matrix considers both the likelihood of a consequence and the severity or impact of that consequence.

Example:
A patient who lives remotely and is unable to travel requires a comprehensive geriatric assessment. Offering in-person CGA, only, would have the harmful consequence of the patient not being able to access this specialized service or waiting a long time to access this service. Using the risk matrix, this potential negative consequence would likely be rated as very likely and the potential harm as moderately to significantly severe. As a result of this risk analysis, offering in-person CGA only would be determined to be high risk.

For this same patient, the clinician may be concerned about the potential harms of making recommendations without completing a 'hands-on' physical assessment. This potential negative consequence may be rated as somewhat likely and the potential harm as significantly severe. Again, risk analysis may indicate that virtual assessment is also high risk.

Once the potential consequences have been identified and the associated risks analyzed, consideration can then be given to which risks can be removed or reduced and which risks must be retained.

Examples:

REMOVE risk of delay and lack of in-person assessment by offering timely access to an outreach CGA service.

REDUCE risk by having another health provider (e.g., home care) complete a physical assessment and share the results

REDUCE risk by completing part of assessment virtually in order to provide timely support and complete physical assessment at a later date, in-person

RETAIN risk - It will rarely be possible, or feasible, to remove all risks. When risks must be retained, ensure both the potential benefits and harms are discussed when explaining options to patients and obtaining informed consent.

Risk Matrix

LIKELIHOOD ↓ / SEVERITY →	1	2	3
1	LOW – 1 –	LOW – 2 –	MEDIUM – 3 –
2	LOW – 2 –	MEDIUM – 4 –	HIGH – 6 –
3	MEDIUM – 3 –	HIGH – 6 –	HIGH – 9 –

A risk analysis process such as this can be used for complex individual patient situations or can be applied to groups of patients to support model development and process development

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Virtual Care Task Group Members

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