Behavioural Supports **Ontario**

Hamilton Niagara Haldimand Brant **LHIN**

'I am who I am so help me continue to be me'

Primary Care
Behavioural Supports Ontario

Toolkit

Ontario
Health Quality Ontario

Alzheimer Knowledge Exchange

Alzheimer Society
ONTARIO

Ontario
Local Health Integration Network

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INTRODUCTION

The Behavioural Supports Ontario (BSO) Project aims to create transformative change within the health care system to improve access to quality care for older people with cognitive impairments due to mental health problems, addictions, dementia, or other neurological conditions who exhibit, or are at risk of exhibiting, responsive or challenging behaviours such as aggression, wandering, physical resistance and agitation. The BSO project developed a Framework of Care that focused on system coordination, integrated service delivery and building capacity and knowledge to guide improvement initiatives.

Feedback received from stakeholders on how the local health system performed in meeting the needs of individuals with cognitive impairments identified strengths, and weaknesses, and suggested opportunities for improvement. This led to the development of a number of improvement initiatives that included a primary care toolkit.

The Primary Care Toolkit is a resource that can be used to assist primary care providers with the early identification and management of older adults with behaviour issues. This early identification enables timely access to individual and caregiver directed healthcare services/supports ultimately optimizing their cognitive and functional health status, and overall quality of life.

The tools included were identified by a Committee comprised of specialists in geriatric medicine, geriatric psychiatry and primary care physicians under the leadership of Dr. Jennifer Everson, Physician Lead, Clinical Health System Transformation, HNHB LHIN. The toolkit consists of two components:

1. **Assessment tools**: identification of 8 assessment tools for ease of use or reference.

2. **One number to call:** a single point of entry for primary care providers to access services to support their clients and caregivers needs called "**BSO Connect**".
    - Established within HNHB CCAC, staff process BSO-related calls to ensure connection to services in the community ('*warm connection*' versus providing a phone number)
    - Dial **310-CCAC** *or* **310-2222** (or 1-800-810-000) to access the service.

1. Assessment Tools

Building on existing work, the subcommittee reviewed a range of assessment/screening tools identified through an environmental scan, literature review, and interviews with specialists in geriatrics and psychiatry and family medicine. Tools were assessed based on criteria that included:

- the setting(s) for which they will be utilized
- ease of use
- time needed to complete the assessment tool(s)
- number of questions needed to complete the assessment tool(s) and
- Committee members' expert knowledge as to key components that should be considered when working with this population.

The toolkit provides quick and easy access to a variety of assessment tools and has been designed in such a way that all assessments within the toolkit can usually be completed within one visit. Some clients may require a second visit.

The toolkit has a variety of components and is organized as follows:

The tools included in the toolkit are for '*consideration*' by those working in Primary Care settings. The committee recognizes that there may be similar tools for assessing the target population preferred by individual practitioners. The scope of tools identified within this toolkit support assessments that lead to a comprehensive evaluation of the needs, goals and preferences of the client, which is essential information for the development of a care plan that encompasses both the client and the caregiver.

2. One Number to Call (310-CCAC) Referred to as BSO Connect

The second component included in the toolkit is a process for Primary Care Providers to access community support services for their clients and/or caregivers that they determine to be living 'at risk' in the community due to behaviour issues. Stakeholder feedback highlighted the gap in the current system that makes it easier for Primary Care to connect clients with services.

Primary care providers can call "BSO Connect" (**310-CCAC**) to link a client with community services and initiate a person to provide navigational support. *This process includes*:

- The opportunity for Primary Care Providers to be directly connected to an appropriate agency
- Teleconferencing into agencies to reduce repeating patient history multiple times
- Improved coordination of services by activating the client connection to an agency

3. Other BSO Resources

In addition to BSO Connect, there are two other Community Models in Hamilton, Niagara Haldimand-Norfolk, Brant and Burlington areas of the HNHB LHIN that will assist primary care providers:

a) Integrated Community Lead (ICL) Model:

- An agency takes a lead role to coordinate and navigate services for clients
- Primary care providers can collaborate with a client's ICL to develop a mutual plan that encompasses all aspects of care for the client and their caregiver
- Key agencies that provide care for the BSO population have signed Memorandum of Understandings to collaborate and participate in the ICL model.
- Click here for a list of the Integrated Community Lead agencies.

b) BSO Community Outreach Team for crisis*:

- Access to BSO staff, with geriatric expertise, through existing local crisis teams
- Primary care can call the Community Outreach Team when it is identified that the client is at risk or requires a 'just in time' response
- Primary care can inform caregivers to call the team when they are facing a crisis
- Contact numbers for the HNHB crisis teams: COAST Hamilton (905-972-8338); COAST Niagara (1-800-263-4944); COAST Burlington (1-877-825-9011); St. Leonard's in Brantford (1-866-811-7188); Crisis Assessment & Support Team (CAST) in Haldimand-Norfolk (1-866-487-2278)

For more information on the BSO Project, please refer to Hamilton Niagara Haldimand Brant Local Health Integration Network website (link): http://www.hnhblhin.on.ca/Page.aspx?id=13450

* ***Crisis*** *refers to a sudden increase in an individual's behaviours that may cause challenges and/or risk to self, the caregivers or others. For example, a caregiver may be feeling vulnerable due to the increase in aggressive behaviours of a loved one, or the client may have been found wandering on the street, or the client may be at home refusing services that are placing them at risk.*

Pathway for a Patient Displaying Behavioural Changes

Responsive Behaviours

Physical Aggression

(Biting, scratching, hitting, kicking, sexual advances)

Physical Non-Aggression

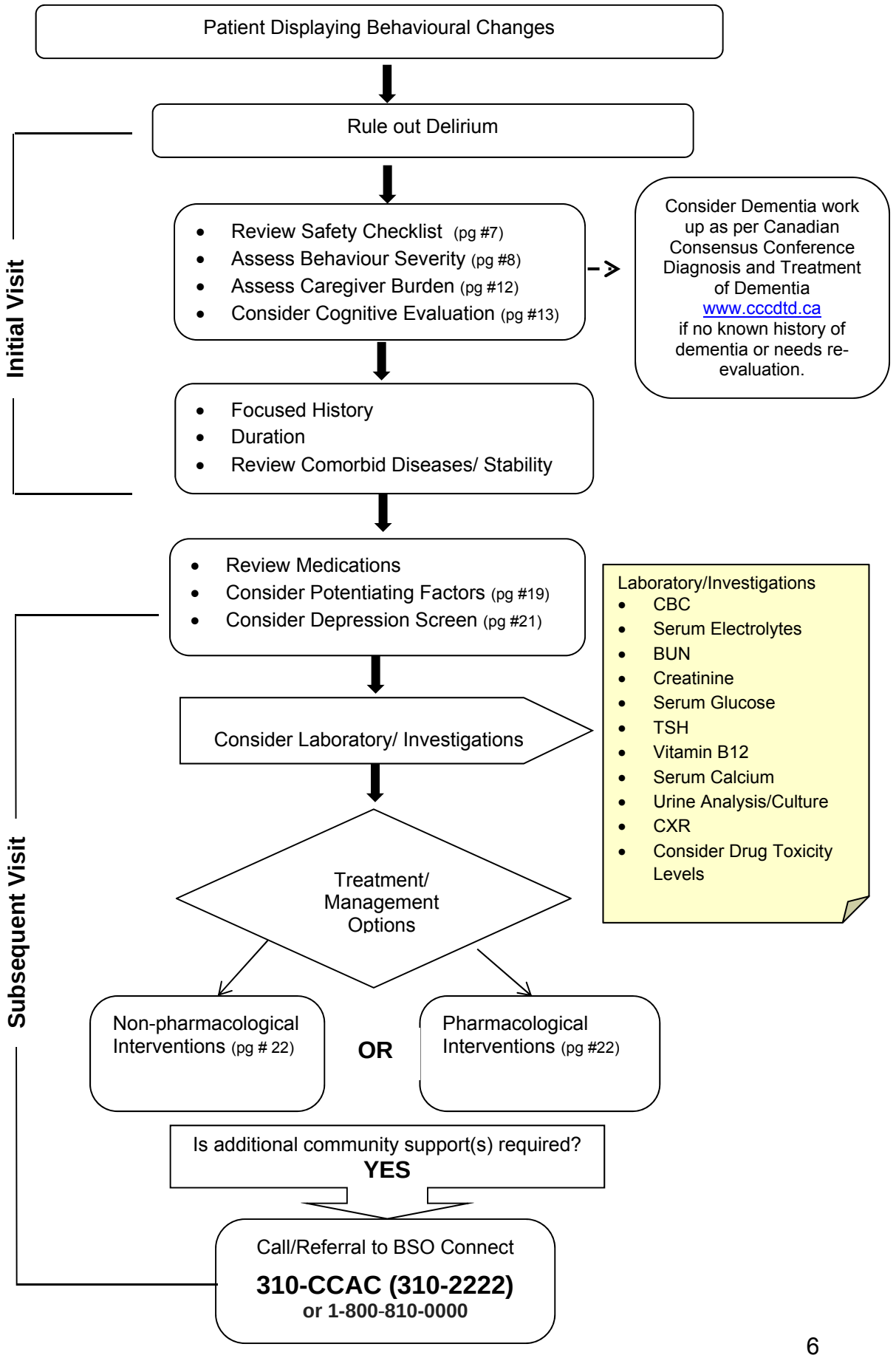
(Pacing, wandering, inappropriate dress, disrobing, hoarding, hiding things,

Verbal Aggression

(Yelling, accusing, swearing)

Verbal Non-aggression

(Repetitive sentences or questions, constant requests)



Safety Checklist: *Risks At a Glance*

This tool is to be used to explore potential risks for your patients and act as a reminder of the issues that can develop.

Risk	Yes	No
Rule out Delirium		
Risk to self		
Risk to others (firearms, weapons, assault, sexual)		
Unable to call for help		
Access to firearms		
Person lives alone and/or has no social support		
Fire risk		
Wandering		
Driving (Contact Ministry of Transportation if there is sufficient grounds for concern)		
Altercations with the police		
Financial Risk (i.e. abuse by others or person themselves mismanaging their funds)		
Impact on dwelling arrangements (i.e. is the client at risk of being evicted or potentially evicted)		

Behaviour Assessment

Cohen-Mansfield Agitation Inventory[1] (CMAI)[2]

Instructions for Self-Administered Behavioural Assessment

(to be given to caregiver prior to appointment)

The goal of this survey is to understand the frequency and type of agitation that you observe, in order to improve care for your family member, partner or client. The purpose of the survey is to find out what exactly is going on. This is not a negative reflection on anyone.

1. Try to complete the survey in a quiet area if possible, where there is minimum interruption so as to increase attention to the rating.

2. The survey usually requires 10-15 minutes to complete

3. Thinking of all related instances over the **past two weeks**, please r**ate the frequency of each type of behaviour** that you have observed on a scale of 1 to 5. For example:

   1 = never observed
   2 = less than one per week
   3 = once several times per week
   4 = several times per day
   5 = a few times per hour or continuously for half an hour or more

4. Sometimes behaviors occur at irregular frequencies such as rarely during one week and more frequently during another. Try to average over the past two weeks to get the frequency which best reflects its occurrence.

5. Each behavior on the Cohen-Mansfield Agitation Inventory (CMAI) is actually a group of behaviors. It is impossible to list all examples of all the behaviors which may occur. When a behaviour is unlisted, try to find a behavior on the CMAI that is most similar.

6. Some behaviors may be very complex. In these cases it is best to try and break down the complex behavior into several simple behaviors that may be found on the Cohen-Mansfield Agitation Inventory (CMAI), and score each behavior separately.

[1] Copyright: Dr. Jiska Cohen-Mansfield
[2] http://www.dementia-assessment.com.au/symptoms/CMAI_Manual.pdf. Use of the full CMAI manual is recommended to fully understand how to use this tool appropriately.

Behaviour Assessment

Cohen-Mansfield Agitation Inventory (CMAI)

Instructions for Interviewing Caregiver for Behaviour Assessment

1. Explain why this assessment is important.
2. Try to conduct the interview in a quiet area to increase attention to the rating.
3. Most frequently, the interviewer reads aloud each category to the caregiver. Providing a copy of the CMAI for the respondent helps with comprehension of each behavior as well as facilitates a better understanding of the 5- point rating scale. To further improve the interview, mail or show the respondent the instrument several days before the interview, allowing him/her to think about the questions in advance.
4. To complete the CMAI thoroughly, allow 20 minutes for the interview.
5. Make sure the respondent understands the frequency scale. Supply all the examples and encourage the respondent to think of all related instances during the past two weeks.
6. Sometimes respondents are reluctant to assign a high frequency, feeling that this may signify disapproval of the older person or of their care. Explain that the purpose of the interview is to find out what exactly is going on. This is not a negative reflection on anyone.
7. Sometimes behaviors occur at irregular frequencies such as rarely during one week and more frequently during another. Try to average over the past two weeks to get the frequency which best reflects its occurrence.
8. In some cases, a respondent may be tempted to rationalize. Be persistent in obtaining a frequency rating for each behavior despite any explanations or excuses made for the behavior by the respondent.
9. When you are made aware of an unlisted behavior, try to find a behavior on the CMAI that is most similar.
10. Some behaviors described by respondents may be very complex. Try and break down the complex behavior into several simple behaviors that may be found on the CMAI, and score each behavior separately.

Note: The instructions provided above are a condensed version of the complete instructions provided in the Instruction Manual for the Cohen-Mansfield Agitation Inventory, found at the following link: http://www.dementia-assessment.com.au/symptoms/CMAI_Manual.pdf.

Behaviour Assessment

The Cohen-Mansfield Agitation Inventory (CMAI) – Short Form[3]

Thinking of all related instances over the past two weeks, please rate the frequency of each type of behaviour that you have observed on a scale of 1 to 5. For example:

1 = never observed
2 = less than one per week
3 = once several times per week
4 = several times per day
5 = a few times per hour or continuously for half an hour or more[4]

Please circle the most appropriate rating when you consider the past two weeks.

		Never	Less than once a week	Once or several times a week	Once or several times a day	A few times an hour or continuous for half an hour or more
		1	2	3	4	5
1.	Cursing or verbal aggression	1	2	3	4	5
2.	Hitting (including self), kicking, pushing, biting, scratching, aggressive spitting, (including at meals)	1	2	3	4	5
3.	Grabbing onto people, Throwing things, Tearing things or destroying property	1	2	3	4	5
4.	Other aggressive behaviours or self-abuse including: Intentional falling, Making verbal or physical sexual advances, Eating/drinking, chewing	1	2	3	4	5

[3] http://www.dementia-assessment.com.au/symptoms/CMAI_Manual.pdf. Use of the full CMAI manual is recommended to fully understand how to use this tool appropriately. Copyright: Dr. Jiska Cohen-Mansfield

[4] In order to simplify the instructions, this section of instructions comes from the *Instructions for Self-Administered Behavioural Assessment, Ibid.* **The original instructions on the tool are as follows:** Please read each of the agitated behaviors, and check how often (from 1-5) they were manifested by the participant over the last 2 weeks; if more than one occurred within a group, add the occurrences, e.g., if hitting occurred on 3 days a week, and kicking occurred on 4 days a week, 3 + 4 = 7 days; circle 4, once or several times a day.

		Never	Less than once a week	Once or several times a week	Once or several times a day	A few times an hour or continuous for half an hour or more
	inappropriate substances, Hurt self or other					
5.	Pace, aimless wandering, Trying to get to a different place (e.g. out of the room, building)	1	2	3	4	5
6.	General restlessness, Performing repetitious mannerisms, tapping, strange movements	1	2	3	4	5
7.	Inappropriate dress or disrobing	1	2	3	4	5
8.	Handling things inappropriately	1	2	3	4	5
9.	Constant request for attention or help	1	2	3	4	5
10.	Repetitive sentences, calls, questions or words	1	2	3	4	5
11.	Complaining, negativism, refusal to follow directions	1	2	3	4	5
12.	Strange noises (weird laughter or crying)	1	2	3	4	5
13.	Hiding things, Hoarding things	1	2	3	4	5
14.	Screaming	1	2	3	4	5

Caregiver Burden Assessment Tool

1. Zarit Burden Interview (ZBI) – 12 item version

   While originally the ZBI was widely distributed for free, the current official version must be ordered through MAPI Research Trust. A User Agreement needs to be completed and signed to acknowledge the specific conditions required by the Author.

   A representative from MAPI Research Trust has advised the LHIN that the ZBI is free of charge to physicians when using in their individual clinical practices, but a User Agreement still needs to be completed. Please see link below.

   http://www.mapi-trust.org/services/questionnairelicensing/cataloguequestionnaires/97-zbi

Cognitive Assessment Tools

Two tools have been identified:

1. MMSE (Mini Mental State Examination) with Clock Drawing
   The MMSE is a brief, quantitative measure of cognitive status in adults. It can be used to screen for cognitive impairment, to estimate the severity of cognitive impairment at a given point in time, to follow the course of cognitive changes in an individual over time, and to document an individual's response to treatment.

   While originally the MMSE was widely distributed for free, the current official version must be ordered through the copyright owner since 2001, Psychological Assessment Resources: (PAR).

   http://www4.parinc.com/Products/Product.aspx?ProductID=MMSE

2. GPGOG (The General Practitioner Assessment of Cognition)Screening Test

   - Refer to page 16 for the GPGOG Screening test
   - In the absence of being able to get details directly from the patient, refer to page 17 to ask a caregiver (or 'informant') questions related to the patient's cognition

Instructions for the Clock Drawing Test[5]

Step 1: Give patient a sheet of paper with a large (relative to the size of handwritten numbers) predrawn circle on it. Indicate the top of the page.

Step 2: Instruct patient to draw numbers in the circle to make the circle look like the face of a clock and then draw the hands of the clock to read "10 after 11."

Scoring:

Score the clock based on the following six-point scoring system:

Score	Error(s)	Example(s)
1	"Perfect"	No errors in the task
2	Minor visuospatial errors	a) Mildly impaired spacing of times b) Draws times outside circle c) Turns page while writing so that some numbers appear upside
3	Inaccurate representation of 10 after 11 when visuospatial organization is perfect or shows only minor deviations	a) Minute hand points to 10 b) Writes "10 after 11" c) Unable to make any denotation of time
4	Moderate visuospatial disorganization of times such that accurate denotation of 10 after 11 is impossible	a) Moderately poor spacing b) Omits numbers c) Perseveration: repeats circle or continues on past 12 to 13, 14, 15, etc. d) Right-left reversal: numbers drawn counterclockwise e) Dysgraphia: unable to write
5	Severe level of disorganization as described in scoring of 4	See examples for scoring of 4
6	No reasonable representation of a clock	a) No attempt at all b) No semblance of a clock at all c) Writes a word or name

(Shulman et al., 1993)

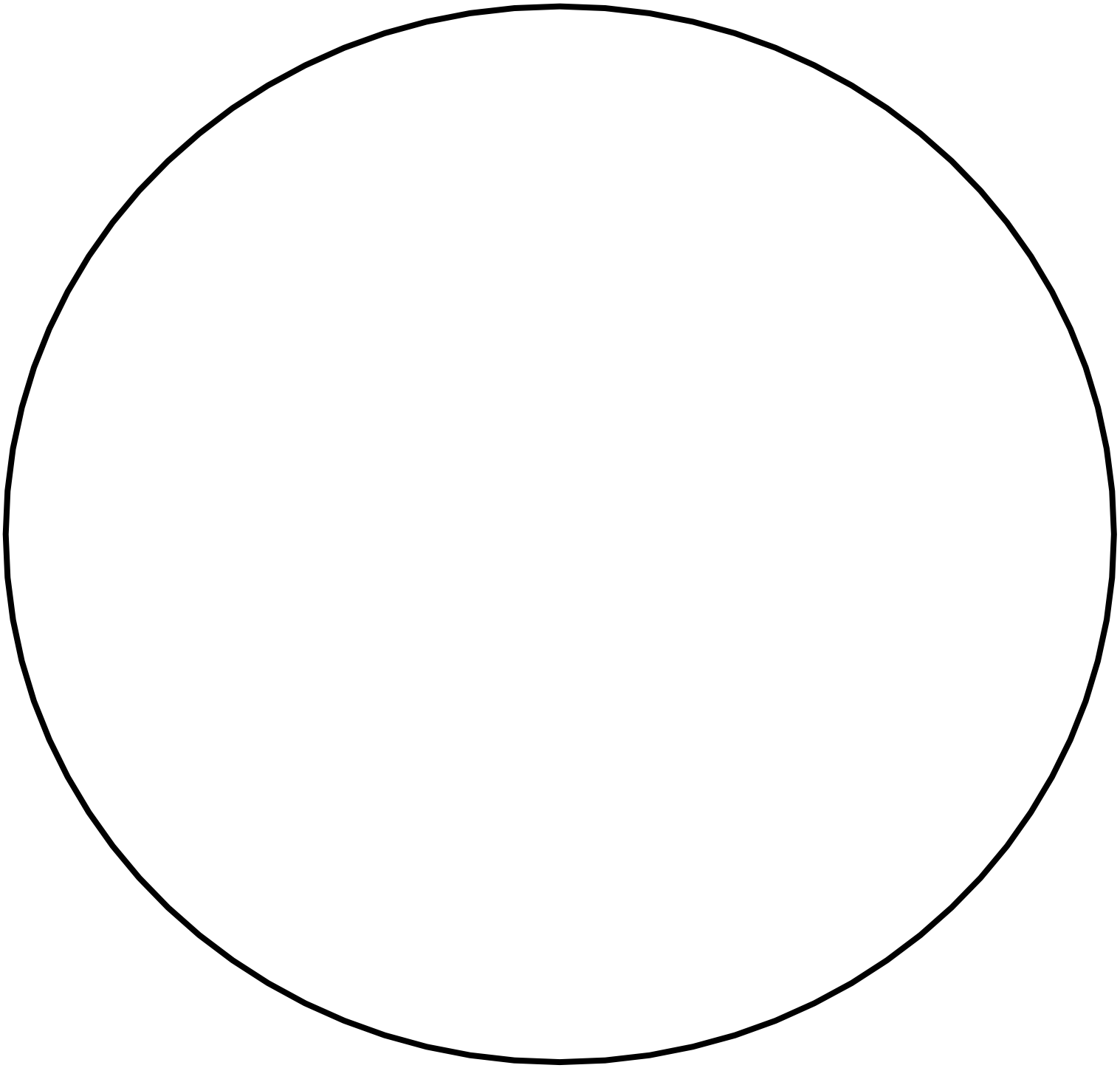
Higher scores reflect a greater number of errors and more impairment. A score of ≥3 represents a cognitive deficit, while a score of 1 or 2 is considered normal.

[5] Kirby M, Denihan A, Bruce I, Coakley D, Lawlor BA. The clock drawing test in primary care: sensitivity in dementia detection and specificity against normal and depressed elderly. *Int J Geriatr Psychiatry*. 2001;16:935-940.

- Richardson HE, Glass JN. A comparison of scoring protocols on the clock drawing test in relation to ease of use, diagnostic group, and correlations with Mini-Mental State Examination. *J Am Geriatr Soc*. 2002;50:169-173.
- Shulman KI, Gold DP, Cohen CA, Zucchero CA. Clock drawing and dementia in the community: a longitudinal study. *Int J Geriatr Psychiatry*. 1993;8:487-496.

Clock Drawing Test

Patient's Name: _____ Date: _____



GPCOG Screening Test[6]

Step 1: Patient Examination

Unless specified, each question should only be asked once.

Name and Address for subsequent recall test

1. "I am going to give you a name and address. After I have said it, I want you to repeat it. Remember this name and address because I am going to ask you to tell it to me again in a few minutes: John Brown, 42 West Street, Kensington." (Allow a maximum of 4 attempts).

Time Orientation	**Correct**	**Incorrect**
2. What is the date? (Exact only)	☐	☐
Clock Drawing – use blank page		
3. Please mark in all the numbers to indicate The hours of a clock (correct spacing required)	☐	☐
4. Please mark in hands to show 10 minutes past eleven o'clock (11.10)	☐	☐
Information		
5. Can you tell me something that happened in the news recently? (Recently = in the last week. If a general answer is given, e.g. "war", "lot of rain", ask for details. Only specific answer scores).	☐	☐
Recall		
6. What was the name and address I asked you to remember?		
John	☐	☐
Brown	☐	☐
42	☐	☐
West (St)	☐	☐
Kensington	☐	☐

To get a total score, add the number of items answered correctly

Total correct (score out of 9) /9

If patient scores 9, no significant cognitive impairment and further testing not necessary.

If patient scores 5-8, more information required. Proceed with Step 2, informant section.

If patient scores 0-4, cognitive impairment is indicated. Conduct standard investigations.

[6] Brodaty et al, JAGS 2002; 50:530-534

Informant Interview[7]

Use this tool when a patient is unable to complete the GPGOG directly, by asking a caregiver or others who know the patient.

Date: _____

Informant's name: _____

Informant's relationship to patient, i.e. informant is the patient's: _____

These six questions ask how the patient is compared to when s/he was well, say 5 – 10 years ago Compared to a few years ago:

	Yes	No	Don't Know	N/A
• Does the patient have more trouble remembering things that have happened recently than s/he used to?	☐	☐	☐	
• Does he or she have more trouble recalling conversations a few days later?	☐	☐	☐	
• When speaking, does the patient have more difficulty in finding the right word or tend to use the wrong words more often?	☐	☐	☐	
• Is the patient less able to manage money and financial affairs (e.g. paying bills, budgeting)?	☐	☐	☐	☐
• Is the patient less able to manage his or her medication independently?	☐	☐	☐	☐
• Does the patient need more assistance with transport? (either private or public)?	☐	☐	☐	☐

(If the patient has difficulties due only to physical problems, e.g. bad leg, tick 'no')

To get a total score, add the number of items answered 'no', 'don't know' or 'N/A'.

Total score (out of 6) ☐

If patient scores 0-3, cognitive impairment is indicated. Conduct standard investigations.

[7] Brodaty et al, *JAGS* 2002; 50:530-534

Potentiating Factors

This tool is to be used to assess if there are any underlying reason(s) to the patient's behaviour

Contributing Factor	Yes	No
Medical		
Pain		
Constipation		
Urinary Retention		
Dehydration/Hunger		
Renal Failure		
Pneumonia		
Alcohol and/or illicit substance use		
Psychiatric		
Depression		
Anxiety		
Psychosis		
Medications		
Dose changes		
Anticholinergics, psychotropics		
New Medications including over the counter medications and any herbals		
PRN Analgesia		
Anxiolytics		
Environment		
Any recent changes to the environment i.e./ move, loss of a loved one etc.		
Temperature, Noise, Lighting		

Geriatric Depression Scale (short form)

Instructions: Circle the answer that best describes how you felt over the **past week**.

1. Are you basically satisfied with your life?	yes	no
2. Have you dropped many of your activities and interests?	yes	no
3. Do you feel that your life is empty?	yes	no
4. Do you often get bored?	yes	no
5. Are you in good spirits most of the time?	yes	no
6. Are you afraid that something bad is going to happen to you?	yes	no
7. Do you feel happy most of the time?	yes	no
8. Do you often feel helpless?	yes	no
9. Do you prefer to stay at home, rather than going out and doing things?	yes	no
10. Do you feel that you have more problems with memory than most?	yes	no
11. Do you think it is wonderful to be alive now?	yes	no
12. Do you feel worthless the way you are now?	yes	no
13. Do you feel full of energy?	yes	no
14. Do you feel that your situation is hopeless?	yes	no
15. Do you think that most people are better off than you are?	yes	no

Total Score _____

Geriatric Depression Scale **(GDS) Scoring Instructions**[8]

Instructions: Score 1 point for each **bolded** answer. A score of 5 or more suggests depression.

1.	Are you basically satisfied with your life?	yes	**no**
2.	Have you dropped many of your activities and Interests?	**yes**	no
3.	Do you feel that your life is empty?	**yes**	no
4.	Do you often get bored?	**yes**	no
5.	Are you in good spirits most of the time?	yes	**no**
6.	Are you afraid that something bad is going to Happen to you?	**yes**	no
7.	Do you feel happy most of the time?	yes	**no**
8.	Do you often feel helpless?	**yes**	no
9.	Do you prefer to stay at home, rather than going Out and doing things?	**yes**	no
10.	Do you feel that you have more problems with memory than most?	**yes**	no
11.	Do you think it is wonderful to be alive now?	yes	**no**
12.	Do you feel worthless the way you are now?	**yes**	no
13.	Do you feel full of energy?	yes	**no**
14.	Do you feel that your situation is hopeless?	**yes**	no
15.	Do you think that most people are better off than You are?	**yes**	no

A score of $\geq$ 5 suggests depression ***Total Score*** _____

[8] Yesavage, J. (1986) The use of Rating Depression Series in the Elderly, in Poon (ed.): Clinical Memory Assessment of Older Adults, *American Psychological Association.*

Shiekh, J. & Yesavage, J. (1986) Geriatric Depression Scale; recent findings in development of a shorter version. In *Clinical Gerontology: A Guide to Assessment and Intervention* (ed. J. Brink). New York: Howarth Press.

Treatment/Management

Non-pharmacological Interventions
Caregiver support/education Alzheimer Society, First Link, CCAC, Respite, Day Programs, Caregiver Connect, BSO Connect
Referrals to Geriatric Psychiatry, Geriatric Medicine

Pharmacological Interventions
Stop unnecessary Medications i.e./ anticholinergics, tricyclics, psychotropics
****Consider Selective Serotonin Reuptake Inhibitor (SSRI)**
*****If dementia, consider cognitive enhancer**
******Consider antipsychotic**

**The use of SSRIs would be considered in the setting of severe depression, anxiety

***Acetylcholinesterase inhibitors would be considered in the setting of dementia which may improve cognition but not specifically improve agitation

****Low dose antipsychotics would be considered in the setting of severe agitation, following cardiovascular risk assessment for a maximum length of 12 weeks. Monitor for adverse effects of sedation, dehydration, pneumonia and DVT. **Antipsychotics should not be used in someone with Lewy Body Dementia (LBD) without specialist advice.**

BSO Primary Care Subcommittee Membership List

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