CSS Shared Resources, Ontario East









Land Acknowledgment

Geriatric Psychiatry Community
Services of Ottawa

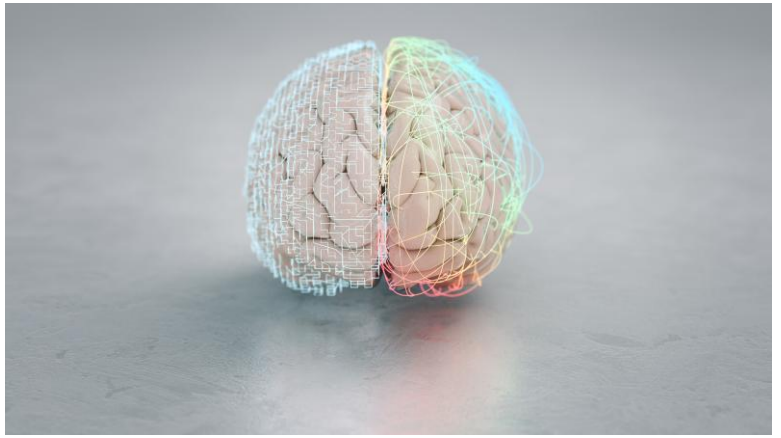
Mental Health, Mental Illness, Parkinson's Disease

November 5th, 2026
10:30 - 12:00

Kaitlyn Borutskie, BScN, MN, RN
Sharon Smith, OT Reg. (Ont.)
Psychogeriatric Resource Consultants (PRC)

Outline

- Mental Health vs Mental Illness
- Common Mental Illnesses
- Mental Health Promotion
- Service Navigation for Mental Health
- Parkinson's Disease



Mental health refers to a state of wellbeing. It includes our emotions, feelings of connection to others, our thoughts and feelings, and being able to manage life's highs and lows.

(Canadian Mental Health Association [CMHA], 2025; Orphana et al., 2016)

Mental Health Continuum

	HEALTHY	REACTING	INJURED	ILL
EMOTIONAL WELL-BEING	Frequent and regular experience of positive thoughts and emotions	Some reduced experience of positive thoughts and emotions	Finding it difficult to experience positive thoughts and emotions	Almost never experience positive thoughts and emotions
PERFORMANCE & FUNCTIONING	My capacity to function is excellent	My capacity to function is good	My capacity to function is fair	My capacity to function is poor
SLEEP	Mostly get enough quality sleep	Sometimes get enough quality sleep	Rarely get enough quality sleep	Never get enough quality sleep
PHYSICAL WELL-BEING	My health is excellent	My health is good	My health is fair	My health is poor
SOCIAL WELL-BEING	Socially active	Decreased social activities	Avoidance and/or withdrawal from social activities	Don't go out or answer the phone
SPIRITUAL WELL-BEING	Established sense of purpose and meaning; beliefs and worldview are secure	Exploring sense of purpose and meaning; beliefs and worldview are challenged	Losing sense of purpose and meaning; beliefs and worldview are weakened	Lost sense of purpose and meaning; beliefs and worldview are shattered
ADDICTIONS	No or limited use of alcohol and/or substances and/or gambling	Regular but controlled use of alcohol and/or substances and/or gambling to cope	Increased use of alcohol and/or substances and/or gambling; hard to control with negative consequences	Frequent use of alcohol and/or substances and/or gambling; unable to control with severe consequences

(Government of Canada, 2025)

Mental illness refers to a wide range of disorders that affect our mood, thinking, and behaviour.

Ex. Anxiety disorder,
Bipolar disorder, Schizophrenia…

(CMHA, 2025; Orphana et al., 2016)

Common Mental Illnesses In Older Adults

Depressive Disorders

Major Depressive Disorder
Postpartum Depression
Seasonal Affective Disorder
Etc.

Major Depressive Disorder

Not a normal part of aging



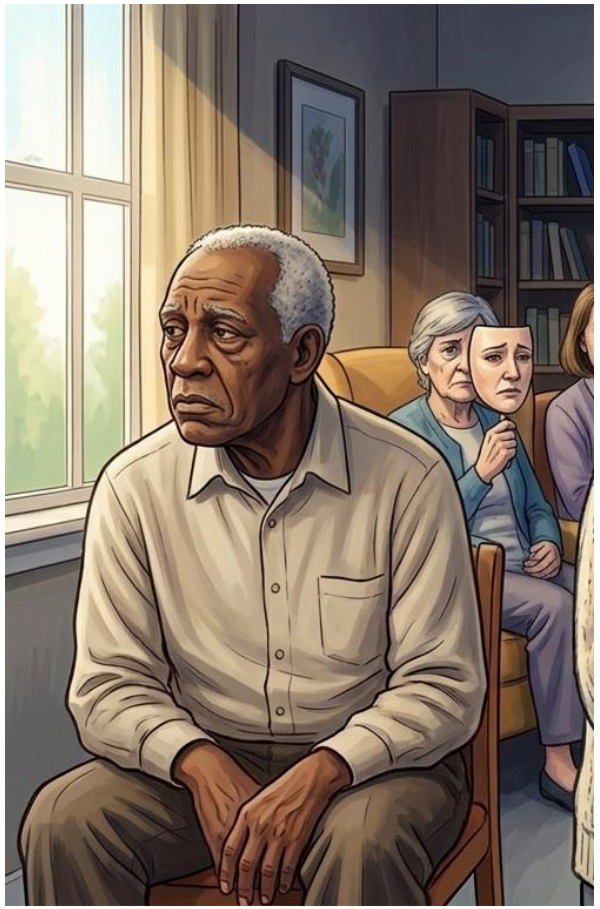
Diagnostic Criteria for Major Depressive Disorder

Experiencing five+ of the following during the same 2-week period (#1 or 2 must be present). Symptoms are causing significant distress or functional impairment.

1. Depressed mood most of the day, nearly every day.
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day.
3. Significant weight loss or gain / decrease or increase in appetite nearly every day.
4. A slowing down of thoughts and reduction of physical movement.
5. Fatigue or loss of energy nearly every day.
6. Feelings of worthlessness or excessive or inappropriate guilt nearly every day.
7. Diminished ability to think or concentrate, or indecisiveness, nearly every day.
8. Recurrent thoughts of death or suicidal ideation.

(DSM5)

Signs & Symptoms of Depression



“SIG E CAPS”

Sleep disrupted
Interest decreased
Guilty feelings
Energy decreased
Concentration poor
Appetite disrupted
Psychomotor agitation or slowing
Suicidal ideation

Assessment Tools

Patient Health Questionnaire-9 (PHQ-9)

or

Geriatric Depression Scale (GDS)

If moderate-severe cognitive impairment:

Cornell Scale for Depression in Dementia

(Canadian Coalition for Seniors Mental Health [CCSMH], 2021)

I
S
E
A
G
C
P
S

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

ID #: _____ DATE: _____

Over the last *2 weeks*, how often have you been bothered by any of the following problems?
(use "✓" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite — being so figety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3
add columns		+	+	

(Healthcare professional: For interpretation of TOTAL, please refer to accompanying scoring card). TOTAL:

10. If you checked off *any problems*, how *difficult* have these problems made it for you to do your work, take care of things at home, or get along with other people?

- Not difficult at all _____
- Somewhat difficult _____
- Very difficult _____
- Extremely difficult _____

Copyright © 1999 Pfizer Inc. All rights reserved. Reproduced with permission. PRIME-MD© is a trademark of Pfizer Inc.

A2663B 10-04-2005

Depression & Older Adults

Depression can be triggered by things like:

- Loss (loss of a loved one, loss of hearing or mobility, loss of independence)
- Major Life Changes (moving to retirement home, financial status changes, retirement)
- Medical Conditions (chronic pain, stroke, dementia)
- Isolation (living alone, fewer social connections)

Depression may not be recognized in older adults

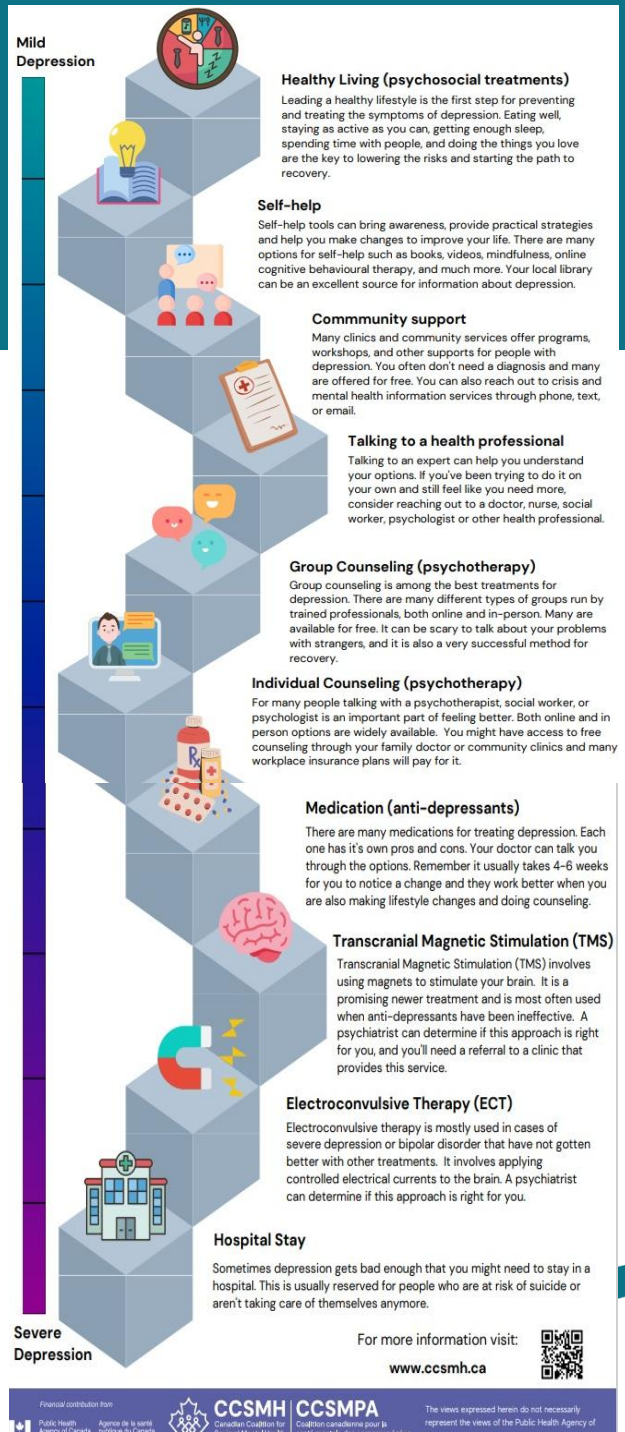
- It is NOT a normal part of aging
- Depression CAN be treated

Treatment Options

The Treatment of Depression for Older Adults Infographic

Stepped care model

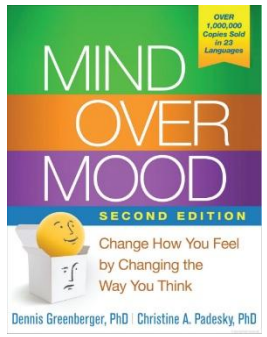
Developed by Canadian Coalition for Seniors' Mental Health (CCSMH)



(CCSMH, 2021)

Tx Option –
Self Help, Community Supports, Counselling

- The Fountain of Health
  - Behavioural activation and goal setting
  - https://fountainofhealth.ca/en



- Mind Over Mood
  - Workbook based on CBT principles

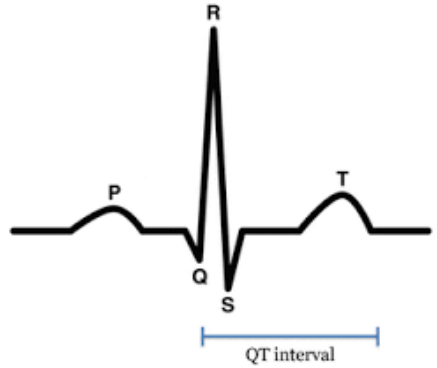
- Access Mental Health – AccessMHA
  - Single point of entry into eastern Ontario's system of care for mental health, substance use, & addictions
  - Website: www.accessmha.ca

- Counselling Connect & The Walk-In Counselling Clinic
  - Same-day or next-day counselling sessions by various agencies
  - https://walkincounselling.com/

Tx Option – Antidepressant Medications

- SSRI (Selective Serotonin Reuptake Inhibitors)
  - Ex. Sertraline (Zoloft)
  - Ex. Escitalopram (Cipralex)
  - Ex. Citalopram (Celexa)

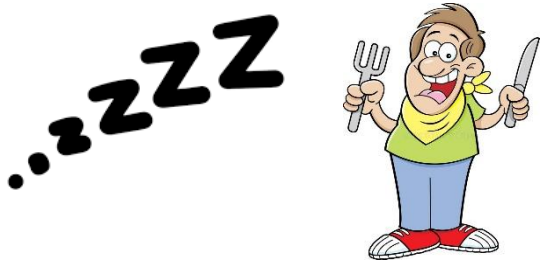




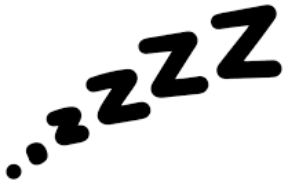
- SNRI (Serotonin-Norepinephrine Reuptake Inhibitors)
  - Ex. Duloxetine (Cymbalta)
  - Ex. Venlafaxine (Effexor)



- Others
  - Ex. Mirtazapine (Remeron)



Ex. Trazodone

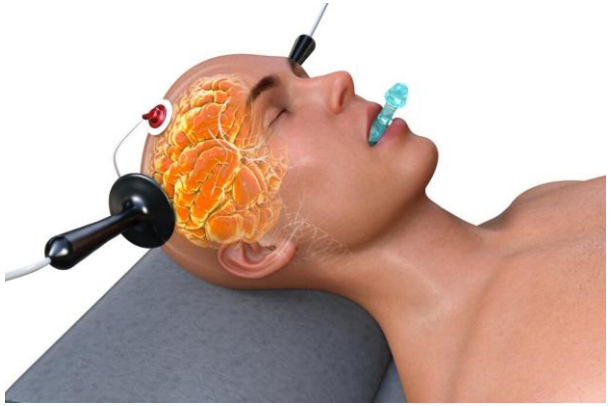


Tx Option –
TMS, ECT, Hospital Stay

- Transcranial Magnetic Stimulation (TMS)
- **Electroconvulsive Therapy (ECT)**
- Hospital Stay



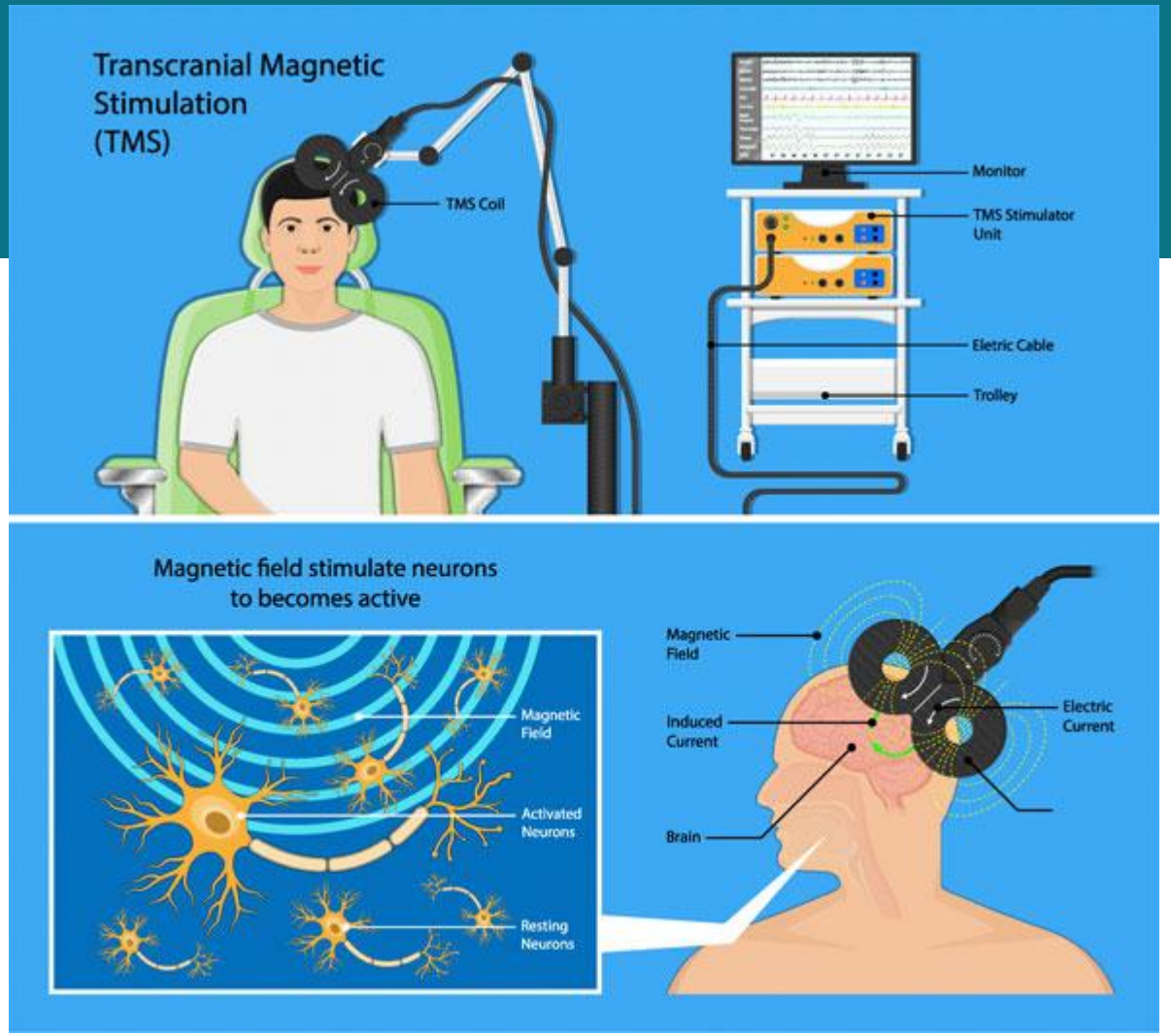




Tx Option –
TMS, ECT, Hospital Stay

- **Transcranial Magnetic Stimulation (TMS)**
- Electroconvulsive Therapy (ECT)
- Hospital Stay





Bipolar Disorder



Mental illness that causes extreme mood swings that includes emotional highs (mania or hypomania) and lows (depression)

Bipolar disorder was previously referred to as manic-depressive disorder / manic-depression

Diagnostic Criteria – DSM5

Bipolar 1 Disorder

At least one manic episode

Might have been preceded or followed by a hypomanic or major depressive episode (hypomanic or major depressive episodes are not required for the diagnosis).

Bipolar 2 Disorder

At least one hypomanic episode
& a major depressive episode

No manic episodes

- Individuals with Bipolar Disorder who also have psychotic symptoms may be misdiagnosed with Schizophrenia
- Individuals with Bipolar 2 Disorder may seek help for only depressive episodes and hypomanic episodes go unnoticed

Manic Episode (Bipolar 1)

A distinct period of abnormally and persistently elevated, expansive, or irritable mood AND abnormally and persistently increased goal-directed activity or energy, last at least **1 week** and present most of the day, nearly everyday

Three or more of the following:

- Inflated self-esteem or grandiosity
- Decreased need for sleep
- More talkative or pressure to keep talking
- Distractibility
- Flight of ideas or subjective feeling thoughts are racing
- Increase goal-directed activity
- Excessive involvement in activities that have a high potential for painful consequences

Mood disturbance causes marked impairment in social or occupational functioning, or necessitates hospitalization to prevent harm to self or others

Hypomanic Episode (Bipolar 2)

A distinct period of abnormally and persistently elevated, expansive, or irritable mood AND abnormally and persistently increased goal-directed activity or energy, last at least **4 days** and present most of the day, nearly everyday

Three or more of the following:

- Inflated self-esteem or grandiosity
- Decreased need for sleep
- More talkative or pressure to keep talking
- Distractibility
- Flight of ideas or subjective feeling thoughts are racing
- Increase goal-directed activity
- Excessive involvement in activities that have a high potential for painful consequences

Episode associated with unequivocal change in functioning that is uncharacteristic of the individual when not symptomatic. Disturbance in mood and change in functioning is observable by others.
Not severe enough to cause marked impairment in social or occupational functioning, or to necessitate hospitalization

Symptoms of Manic or Hypomanic Episode	Symptoms of Depressive Episode
Feeling very up, high, elated, extremely irritable, or touchy	Feeling very down, sad, or anxious
Feeling jumpy or wired, or being more active than usual	Feeling slowed down or restless
Racing thoughts	Trouble concentrating or making decisions
Decreased need for sleep	Trouble falling asleep, staying asleep, or sleeping too much
Talking fast about a lot of different things “flight of ideas”	Talking very slowly, feeling unable to find anything to say, forgetting a lot
Excessive appetite for food, drinking, sex or other pleasurable activities	Lack of interest in almost all activities
Feeling able to do many things at once without tiring	Unable to do even simple things
Feeling unusually important, talented, or powerful	Feeling hopeless or worthless, or thinking about death or suicide

Bipolar Disorder Episodes

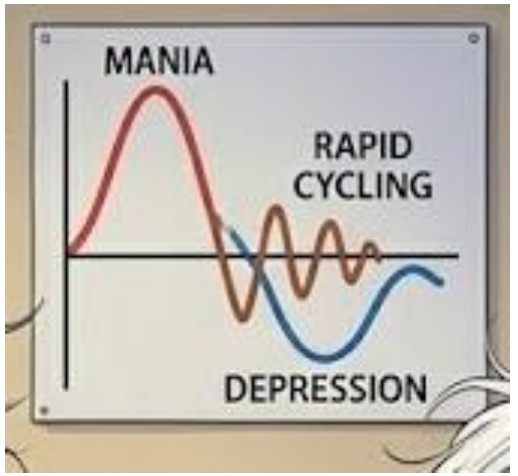
The Episode Length

- Manic episodes can last from a week to several months
- Depressive episodes can last from 2 weeks to several months

The Episode Frequency

- Chronic - persistent or constantly reoccurring, *or*
- Episodic - occurs occasionally & irregularly.

In between episodes, mood usually returns to a healthy baseline



Bipolar Disorder & Older Adults

Fewer manic episodes with less severe symptoms

More frequent and longer depressive episodes

More functional and cognitive impairment

Older adults require longer hospitalizations

Bipolar Disorder Treatment Options

Psychotherapy

Transcranial Magnetic Stimulation

Electroconvulsive Therapy

Medications to stabilize mood

- Lithium, Anticonvulsants, Antipsychotics

Anxiety

Normal and natural response to stress
Part of our fight or flight response
Can be helpful

Anxiety Disorders

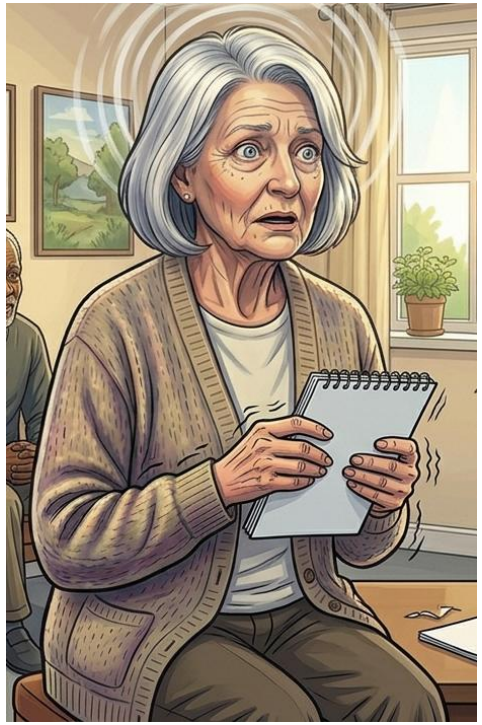


The fear, anxiety, or avoidance is **persistent** causes clinically **significant distress or impairment** in social, occupational, or other important areas of functioning

The Anxiety Disorders

Anxiety disorders are the most common late-life psychiatric diagnosis
More common in woman than men
Higher degree of somatic symptom preoccupation

- Generalized Anxiety Disorder (GAD)
- Specific Phobia
- Agoraphobia
- Separation Anxiety Disorder
- Social Anxiety Disorder
- Panic Disorder
- Etc.



Risk Factors

- Female gender
- Older age
- Depression
- Cognitive impairment
- Chronic health conditions
- Poor self-rated health
- Functional limitations
- Personality traits (neuroticism)
- Poor coping skills
- History of traumatic events
- Insomnia
- Pain
- Poor balance
- Polypharmacy
- Fall history
- Social isolation/loneliness
- Childless
- Lower income

Assessment Tools

Geriatric Anxiety Inventory (GAI-20)

Score of 10 or more suggests significant clinical anxiety

Table 3.

GAI Scale

1. I worry a lot of the time.
2. I find it difficult to make a decision.
3. I often feel jumpy.
4. I find it hard to relax.
5. I often cannot enjoy things because of my worries.
6. Little things bother me a lot.
7. I often feel like I have butterflies in my stomach.
8. I think of myself as a worrier.
9. I can't help worrying about even trivial things.
10. I often feel nervous.
11. My own thoughts often make me anxious.
12. I get an upset stomach due to my worrying.
13. I think of myself as a nervous person.
14. I always anticipate the worst will happen.
15. I often feel shaky inside.
16. I think that my worries interfere with my life.
17. My worries often overwhelm me.
18. I sometimes feel a great knot in my stomach.
19. I miss out on things because I worry too much.
20. I often feel upset.

(CCSMH, 2021)

Assessment Tools

Anxiety in Older Adults with Dementia

Rating Anxiety in Dementia (RAID)

Score of 11 or more suggests significant clinical anxiety

Scoring system :

U. unable to evaluate. 0. absent. 1. mild or intermittent. 2. moderate. 3. severe

Rating should be based on symptoms and signs occurring during two weeks prior to the interview. No score should be given if symptoms result from physical disability or illness. Total score is the sum of items 1 to 18. A score of 11 or more suggests significant clinical anxiety.

			Score
Worry	1.	Worry about physical health.	
	2.	Worry about cognitive performance (failing memory, getting lost when goes out, not able to following conversation).	
	3.	Worry over finances, family problems, physical health of relatives.	
	4.	Worry associated with false belief and/or perception.	
	5.	Worry over trifles (repeatedly calling for attention over trivial matters).	
Apprehension and vigilance	6.	Frightened and anxious (keyed up and on the edge).	
	7.	Sensitivity to noise (exaggerated startle response).	
	8.	Sleep disturbance (trouble falling or staying asleep).	
	9.	Irritability (more easily annoyed than usual, short tempered and angry outbursts).	
Motor tension	10.	Trembling.	
	11.	Motor tension (complain of headache, other body aches and pains).	
	12.	Restlessness (fidgeting, cannot sit still, pacing, wringing hands, picking clothes).	
	13.	Fatigueability, tiredness.	
Autonomic hypersensitivity	14.	Palpitations (complains of heart racing or thumping).	
	15.	Dry mouth (not due to medication), sinking feeling in the stomach.	
	16.	Hyperventilating, shortness of breath (even when not exerting).	
	17.	Dizziness or light-headedness (complains as if going to faint).	
	18.	Sweating, flushes or chills, tingling or numbness of fingers and toes.	
Phobias (fears which are excessive, that do not make sense and tend to avoid–like afraid of crowds, going out alone, being in a small room, or being frightened by some kind of animals, heights, etc.). *Describe*.			
Panic attacks (feelings of anxiety or dread that are so strong that think they are going to die or have a heart attack and they simply have to do something to stop them, like immediately leaving the place, phoning relatives, etc.). *Describe*.			

Reference: K. K. Shankar , M. Walker , D. Frost & M. W. Orrell (1999) The development of a valid and reliable scale for rating anxiety in dementia (RAID), Aging & Mental Health, 3:1, 39-49. Reproduced with permission from M. W. Orrell.

GPCSO SCGPO

Anxiety Treatment

Guided self-help, Bibliotherapy, Relaxation Techniques, Social Prescribing, & Psychoeducation

Therapist-led group or individual CBT, Medications

Psychologists, Psychiatrists, Geriatric Psychiatrist, Geriatricians

Anxiety and Depression: “Bidirectional Relationship”

- Anxiety disorder as a risk factor for late-life depression as well as a predictor of persistence and relapse of depression
- 50% of depressed elderly has a co-morbid anxiety disorder
- 25% of anxious elderly has a comorbid depression
- Anxiety symptoms are more stable than depressive symptoms



Psychotic Disorders

Schizophrenia
Schizoaffective Disorder
Brief Psychotic Disorder
Delusional Disorder
Etc.

What is Psychosis?

- There has been some loss of contact with reality
- A person's thoughts and perceptions are disrupted
    - Hallucinations and/or Delusions
    - Incoherent/nonsense speech & behaviour
    - Suspicious/paranoid/strange ideas
- They may have difficulty recognizing what is real and what is not



(NIMH, 2023)

Hallucinations

False sensory perception with no external stimuli

- Visual
  - Ex. People, animals, things
- Auditory
  - Ex. Voices, music, sounds
- Tactile
  - Ex. Bugs crawling, person touching you
- Olfactory
  - Ex. Odors like gas, chemicals, perfume
- Gustatory
  - Ex. Tastes like metals, bitter, rotten



Delusions

Fixed, false belief not based in reality

- Jealousy – Persistent belief that partner is unfaithful
  - Ex. You cheated on me today! (couple has been together 24/7)
- Persecutory – Person is being targeted, harassed or conspired against by someone or a group
  - Ex. The FBI is using mind-control on us
- Grandiose – Person falsely believes they are powerful, famous, wealthy, or of high status
  - Ex. I inherited millions and the Royal family is coming to celebrate
- Erotomanic – Another person, usually of higher status, is in love with you
  - Ex. Keanu Reeves is my fiancé and we'll be together soon
- Somatic – False belief about one's own physical body or bodily functions
  - Ex. My organs are rotting inside me and they need to be taken out
- Reference – Innocuous events have direct, personal significance
  - Ex. Song lyrics were written specifically to send me a secret message

Asking About Psychotic Symptoms

"I am going to ask you about unusual experiences that people sometimes have."

OR

If the person has acknowledged psychotic symptoms: "You have told me about [psychotic experiences]. Now I am going to ask you more about those kinds of things."

Questions

- Did it ever seem that people were talking about you or taking special notice of you?

- What about receiving special messages from the TV, radio, or newspaper, or from the way things were arranged around you?

- What about anyone going out of their way to give you a hard time, or are trying to hurt you?

Questions

- Did you ever feel that you were especially important in some way, or that you had powers to do things that other people couldn't do?
- Did you ever feel that parts of your body had changed or stopped working? (What did the doctor say?)
- Did you ever feel that you had committed a crime or done something terrible for which you should be punished?

Questions

- Did you ever hear things that other people couldn't hear, such as noises, or the voices of people whispering or talking?
- Did you ever have visions or see things that other people couldn't see? (distinguish from an illusion)
- What about strange sensations in your body or on your skin?
- What about smelling things that other people couldn't smell?

Schizophrenia

- Two or more of the following symptoms, each present for a significant portion of time during a 1-month period (1, 2, or 3 must be present)

Criterion A Symptoms

1. Delusions
2. Hallucinations
3. Disorganized speech
4. Grossly disorganized or catatonic behaviour
5. Negative symptoms

- Level of functioning in work, interpersonal relationships, &/or self-care is ↓
- Symptoms present at least 6 months

Not attributable to substances or another medical condition

R/U Schizoaffective disorder & Depressive / Bipolar disorder with psychotic features

(DSM-5)

Delusional Disorder

- The presence of one or more delusions, lasting 1 month or longer
- Criterion A for schizophrenia has never been met; In other words, no hallucinations, disorganized speech / behaviour, catatonia, negative symptoms
  *Hallucinations, if present, are not prominent & are related to the delusion theme
- Apart from the impact of the delusion or its ramifications, functioning is not markedly impaired, and behaviour is not obviously odd or bizarre
- If mood episodes have occurred, they've been brief

Not attributable to substances or another medical condition

(DSM-5)

Older Adults & Psychosis

- 5% of those 65+ & 10% of those 85+ will experience psychosis
- The most common causes of new-onset psychosis in later life are:
  - Dementia-related syndromes with psychosis
  - Delirium or drug-induced psychosis
  - Primary psychiatric disorders
- Older adults with neurological disorders may be at higher risk for psychosis



(CAMH, 2024)

Anti-Psychotic Medication

In older adults whose psychotic symptoms are related to a primary psychiatric illness, the use of the following classes of medication may be indicated:

- Antipsychotics
  - Risperidone (Risperdal)
  - Paliperidone (Invega)
  - Quetiapine (Seroquel)
  - Aripiprazole (Abilify)
  - Etc.

  Oral & injectable options available
- Anxiolytic and antidepressant medications
- Anticonvulsant medications

(CAMH, 2024)

Anti-Psychotic Medication
Extrapyramidal Side Effects

Acute Dystonia Hours–Days	Muscle spasms, torticollis, oculogyric crisis 
Akathisia Days–Weeks	Restlessness, pacing, leg shaking 
Parkinsonism Weeks–Months	Tremor, rigidity, mask-like face 
Tardive Dyskinesia Months–Years	Lip smacking, tongue protrusion, chewing 

(The_Nursing_Mind)



Did you know that you can have a serious mental illness, but still have good mental health?

© 2019 CAMH



The presence or absence of a mental illness is not a predictor of mental health;

Someone without a mental illness could have poor mental health,

just as a person with a mental illness could have excellent mental health.

Mental Health Promotion

Maintaining Well-Being in Later Life – The Key Ingredients



Positive Thoughts | **Health Habits** | **Social Relationships** | **Interests & Brain Challenges** | **Emotions & Mental Health**

Only 25% of a person's life expectancy is due to family genes.
Lifestyle changes can have a much bigger impact.

(Fountain of Health, 2024)



Positive Thoughts

- Your thoughts play an important role in overall health and how you cope with or bounce back in times of stress
- Due to brain "neuroplasticity" your brain is changed by your thoughts & actions – Positive thinking is a key to good health
- Having a positive outlook on aging can prolong your life expectancy by up to 7.5 years

Positive thinking has been linked to:

- Lower risk of chronic disease and memory loss
- Less isolation and loneliness
- Better handling of stress
- Faster and better recovery from injuries

(Fountain of Health, 2024)



Health Habits

- Physical activity is one of the best ways to promote brain neuroplasticity while boosting your brain's resilience.
- Light physical activity (even walking!) for only 15 mins a day can increase life expectancy by up to 3 years
- Healthy eating promotes wellness and prevents disease. 85% of chronic diseases –like cancer, diabetes, stroke, pain, heart disease and dementia– are caused by unhealthy lifestyles.

Being active and eating nutritious foods has many benefits:

- Improved mood & better quality of sleep
- Lower risk of chronic diseases, disability & falls
- Improved function and independence

(Fountain of Health, 2024)



Social Relationships

- Connecting with others improves mood and supports brain health across the lifespan.
- Loneliness and social isolation are risk factors for your health and can matter more than your cholesterol and blood pressure!
- The impact of social isolation and loneliness can be as bad for your health as smoking 15 cigarettes per day

Being social has been shown to:

- Lower your risk of depression and anxiety
- Increase longevity and reduce risk of stress-related illnesses
- Improve your brain performance and memory
- Lower your risk of dementia

(Fountain of Health, 2024)



Interests & Brain Challenges

- Engaging your mind with your interests promotes brain health and wellbeing. Keeping it active supports neuroplasticity and your brain's resilience

- Like your muscles, your brain improves with use – Engaging in lifelong learning lowers risk of dementia

Continuing to learn new things throughout life will:

- Improve general brain functioning
- Increase memory and concentration
- Lower risk of dementia
- Build your "cognitive reserve"

(Fountain of Health, 2024)



Emotions & Mental Health

- Taking care of your emotional health is vital for wellbeing
- Good mental health helps us enjoy our lives and cope with life's challenges
- A wide range of positive lifestyle behaviours can improve physical health and mental wellbeing

Did you know?

- Talking about mental health can help you feel better
- Research shows mental health, life satisfaction, and self-rated happiness improve as we age despite losses or health challenges
- A positive mental outlook is very protective for long-term health

(Fountain of Health, 2024)

The THRIVE © Approach to Wellbeing

Reflect on how you would rate yourself across the THRIVE domains.

Set a **Valued** smart goal in one of the THRIVE action areas:

- **Thoughts**
- **Health habits**
- **Relationships**
- **Interests**
- **Emotions**

Track your progress over 4-weeks.



(Fountain of Health, 2024)



Small changes can lead to big health benefits over time

TIP – Cut your goal in half so its realistic and achievable

Mental Health Service Navigation

Mental Health Resources – Immediate needs

Emergency or life-threatening 9 – 1 – 1

(call 24/7)

Suicide Crisis Line 9 – 8 – 8

(call or text 24/7)



Mental Health Resources

ConnexOntario **Ontario*

- Website: https://connexontario.ca/

AccessMHA **Eastern Ontario*

- Website: www.accessmha.ca

Resources Online / Other

Counselling Connect **Eastern Ontario*

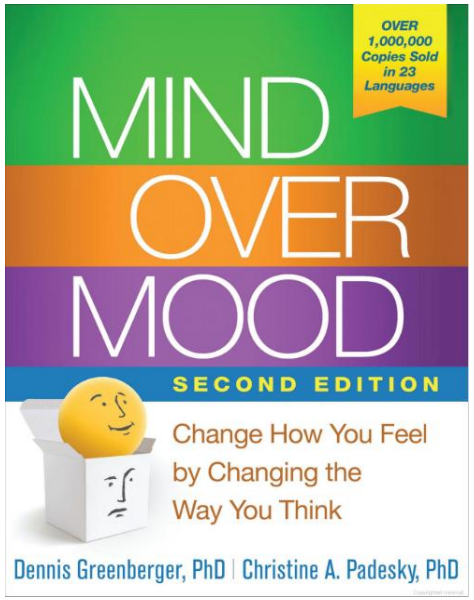
Same-day or next-day phone or video counselling sessions by various agencies
https://www.counsellingconnect.org/

The Fountain of Health

https://fountainofhealth.ca/en

Mind Over Mood

Workbook to purchase



Bounce Back

https://bouncebackontario.ca/

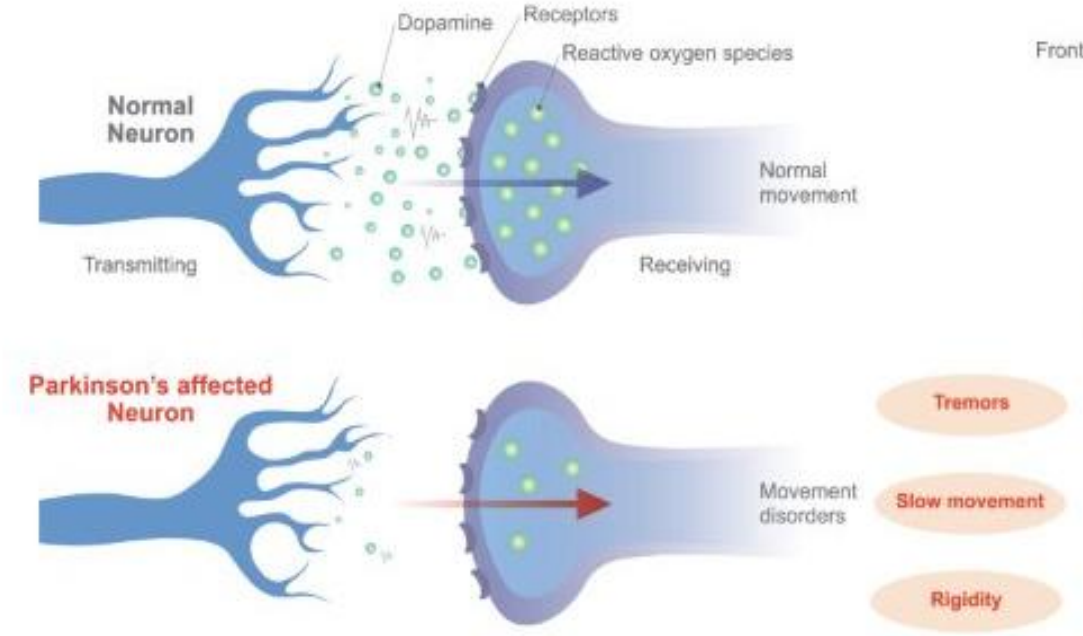
Canadian Coalition for Seniors' Mental Health

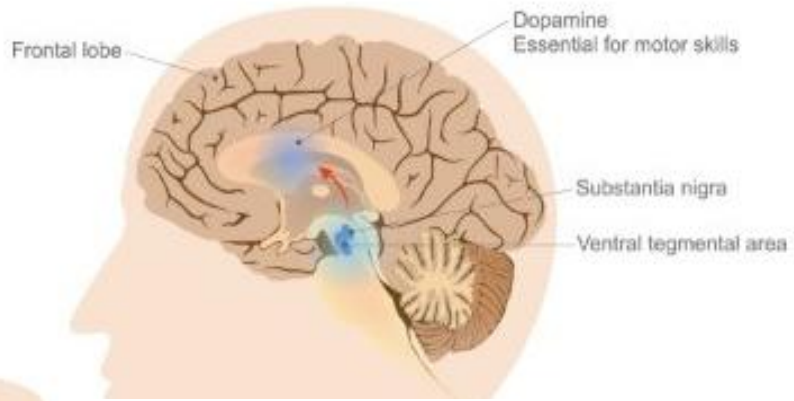
https://ccsmh.ca/

Parkinson's Disease

What Is Parkinson's Disease?

- Parkinson’s is a chronic, progressive, neurodegenerative disease - Movement disorder
- Loss of dopamine-producing nerve cells





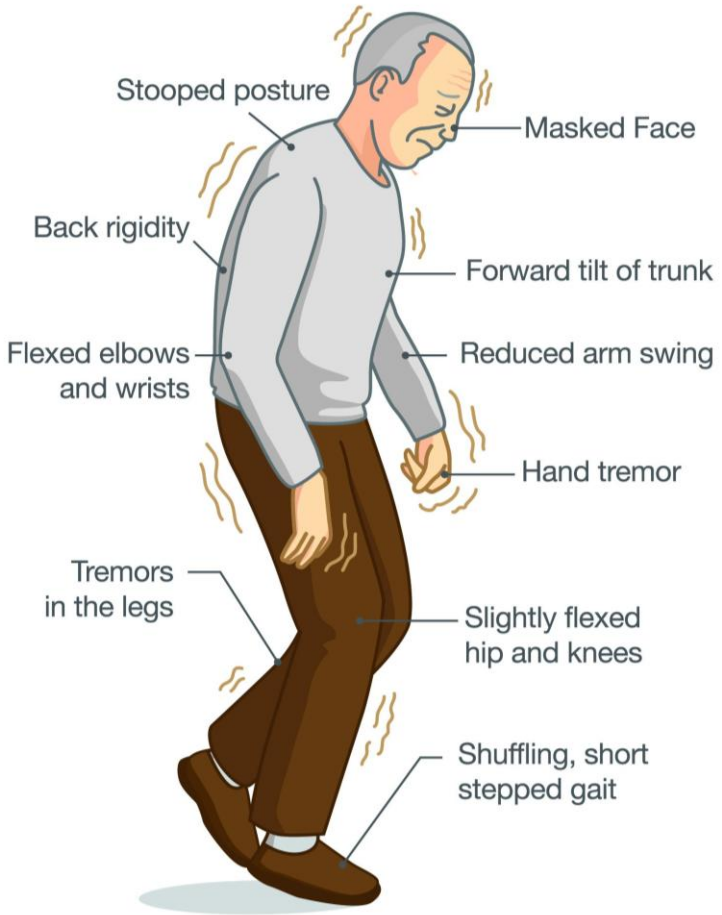
Four classic signs:

- Tremor
- Slowed movements (bradykinesia)
- Stiffness / Rigidity
- Postural instability

(Davis Phinney Foundation, 2022; Grimes et al., 2019)

Tremor

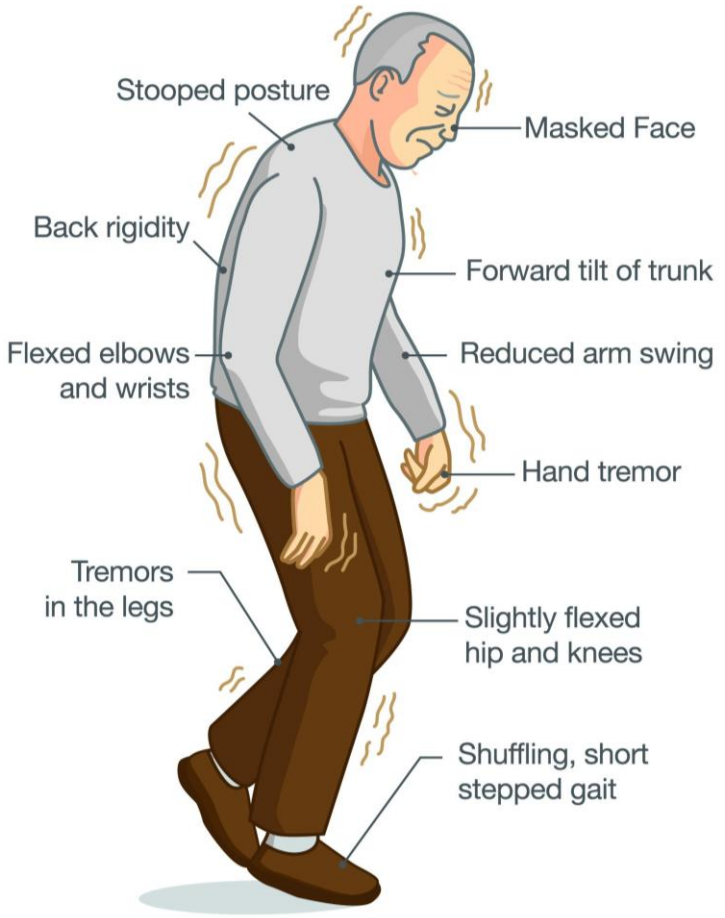
- Tremors affect 70% of people with Parkinson Disease
  - Pill-Rolling Tremor
    - Often 1st sign of PD
  - Resting Tremor
    - Most common in PD
  - Action Tremor
    - Less common, affecting ~25%
  - Internal Tremor



(Davis Phinney Foundation, 2022; Grimes et al., 2019)

Bradykinesia - Slowness of Movement

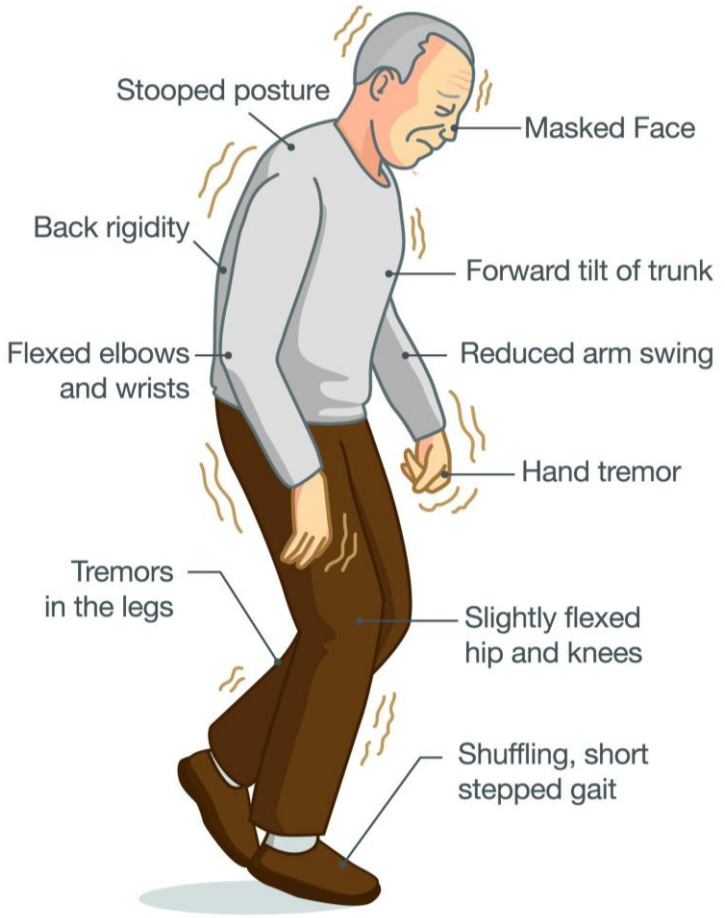
- A change in gait to shuffle-like steps
- Handwriting becomes smaller
- Difficulty getting in and out of bed
- Fatigue as tasks take longer to complete
- Change in speech & vocal projection



(Davis Phinney Foundation, 2022; Grimes et al., 2019)

Stiffness and Rigidity

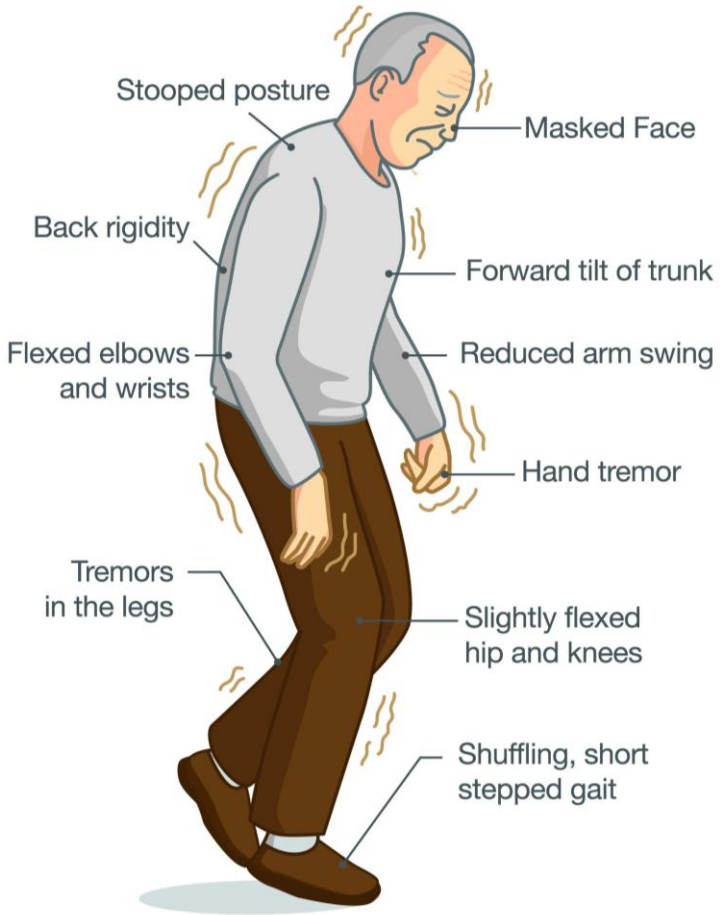
- Stiffness or rigidity of the limbs and trunk are cardinal symptoms of Parkinson's
  - Cogwheel rigidity
  - Mask-like face



(Davis Phinney Foundation, 2022; Grimes et al., 2019)

Postural Instability

- Poor balance and coordination
  - Loss of reflexes
  - Delayed speed & reaction time
- Freezing of Gait
- Falls Risk Increased



(Davis Phinney Foundation, 2022; Grimes et al., 2019)

Medications for Motor Symptoms

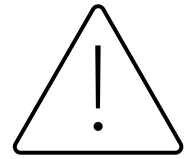
- Dopaminergic Medication
  - Levodopa/Carbidopa "Sinemet"
  - Entacapone/Levodopa/ Carbidopa "Stalevo"

- Dopamine Agonists
  - Pramipexole "Mirapex"
  - Ropinirole "Requip"
  - Rotigotine "Neupro" patch

- MAO-B Inhibitors (Monoamine Oxidase Type B)
  - Rasagiline "Azilect"
  - Safinamide "Onstryv"
  - Selegiline

- COMT Inhibitors (Catechol-o-methyl transferase)
  - Entacapone

- Anticholinergic Medications
  - Benztropine
  - Trihexyphenidyl
  - Procyclidine



(Davis Phinney Foundation, 2022)

On & Off Periods

- OFF times are when your medications aren't working optimally, and your tremor returns or worsens.
- Having a constant medication level in your body can help to prevent OFF times.
- Routine. Routine. Routine. Take on an empty stomach with a glass of water.

(Davis Phinney Foundation, 2022)

Sample Medication List

Dopaminergic Meds + COMT Inhibitor

- Stalevo (Carbidopa 31.25mg – Levodopa 125mg – Entacapone 200mg) 7x daily at 7am, 9am, 11, 1pm, 330pm, 6pm, 8pm
- Stalevo (Carbidopa 25mg – Levodopa 100mg – Entacapone 200mg) once at 10pm
- Sinemet (Levodopa 100mg – Carbidopa 25mg) 1-2x per night PRN

MAO-B Inhibitor

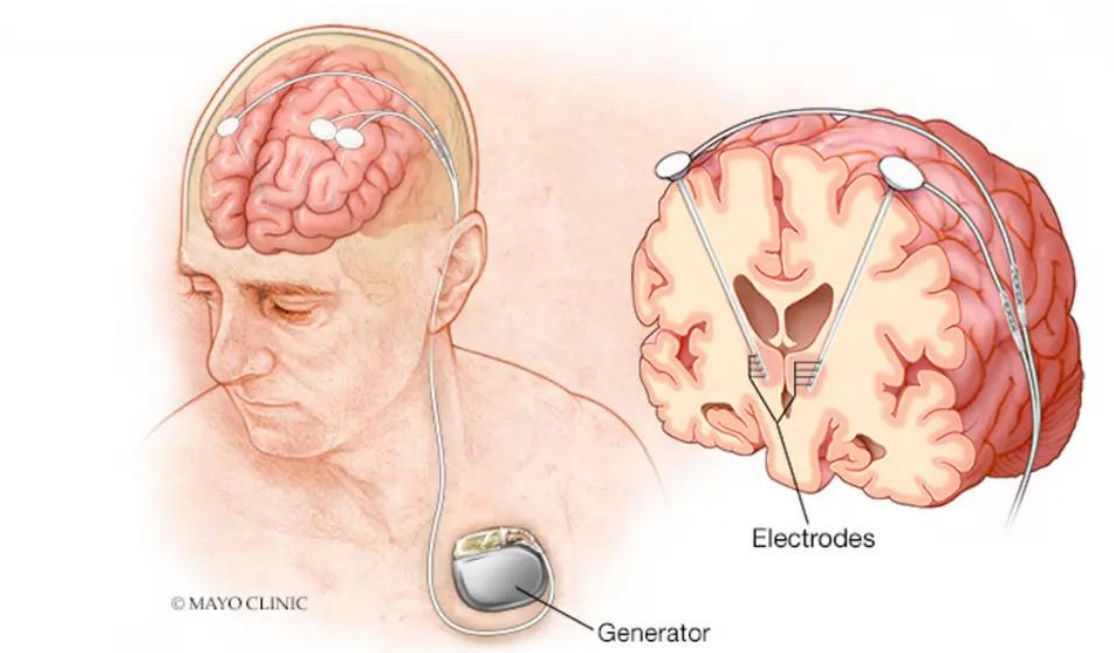
- Safinamide 100mg daily

Dopamine Agonist

- Rotigotine (Neupro) patch 6mg/24hr, change daily

Surgical Option – Deep Brain Stimulation (DBS)

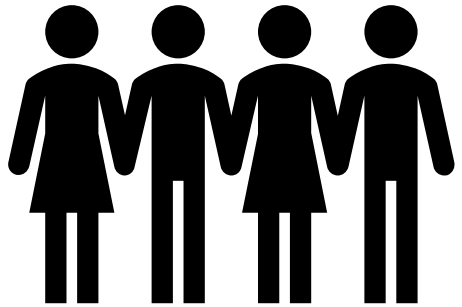
- Highly effective at decreasing motor symptoms
- Electrodes are implanted into certain regions of the brain.
- These electrodes produce electrical impulses that regulate abnormal brain activity.
- The amount of stimulation is controlled by a pacemaker-like device located under the skin in your upper chest.
- A wire placed under your skin connects the device, called a stimulator, to the electrodes in your brain.
- Does not affect dopamine levels in the brain.



(Davis Phinney Foundation, 2022)

Non-Pharm Options

- Physical Therapist
- Occupational Therapist
- Speech-Language Pathologists
- Complimentary Therapies
  - Acupuncture
  - Aromatherapy
  - Art therapy
  - Dance therapy
  - Massage therapy
  - Mindfulness
  - Music therapy
  - Pilates
  - Reiki
  - Tai Chi
  - Yoga



Build A Care Team

(Davis Phinney Foundation, 2022)

Exercise is Essential

- Canadian guidelines for PD (2019) recommend starting exercise as soon as the diagnosis is established
- Regular physical exercise can:
  - Reduce motor symptoms like rigidity, stiffness, slowness, postural instability
  - Positive impact on gait, balance, functional mobility, fine motor skills
  - Reduce non-motor symptoms like sleep problems, constipation, digestion, depression
  - Boost your mood
  - And each year, more studies prove that exercise may slow the progression of Parkinson's.
- High-energy aerobic exercise = Neuroprotection

(Davis Phinney Foundation, 2022; Grimes, 2019)

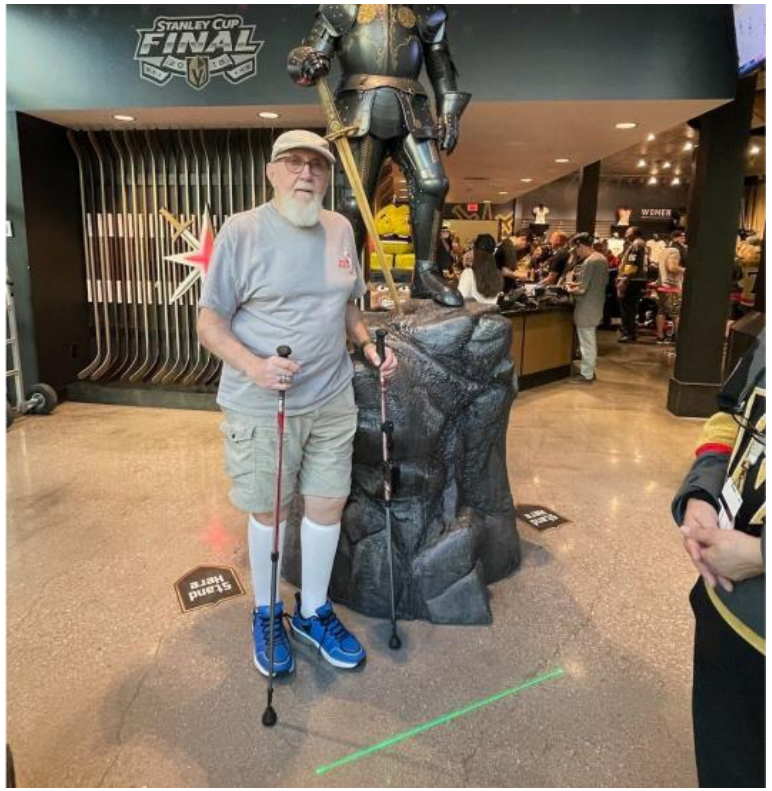
Adaptive Device

- NexStride – adaptable laser that attaches to any walker of cane and projects a green laser line
- NexStride allows the brain to switch from automatic commands to intention-based commands with cueing.

Take big steps & count out loud

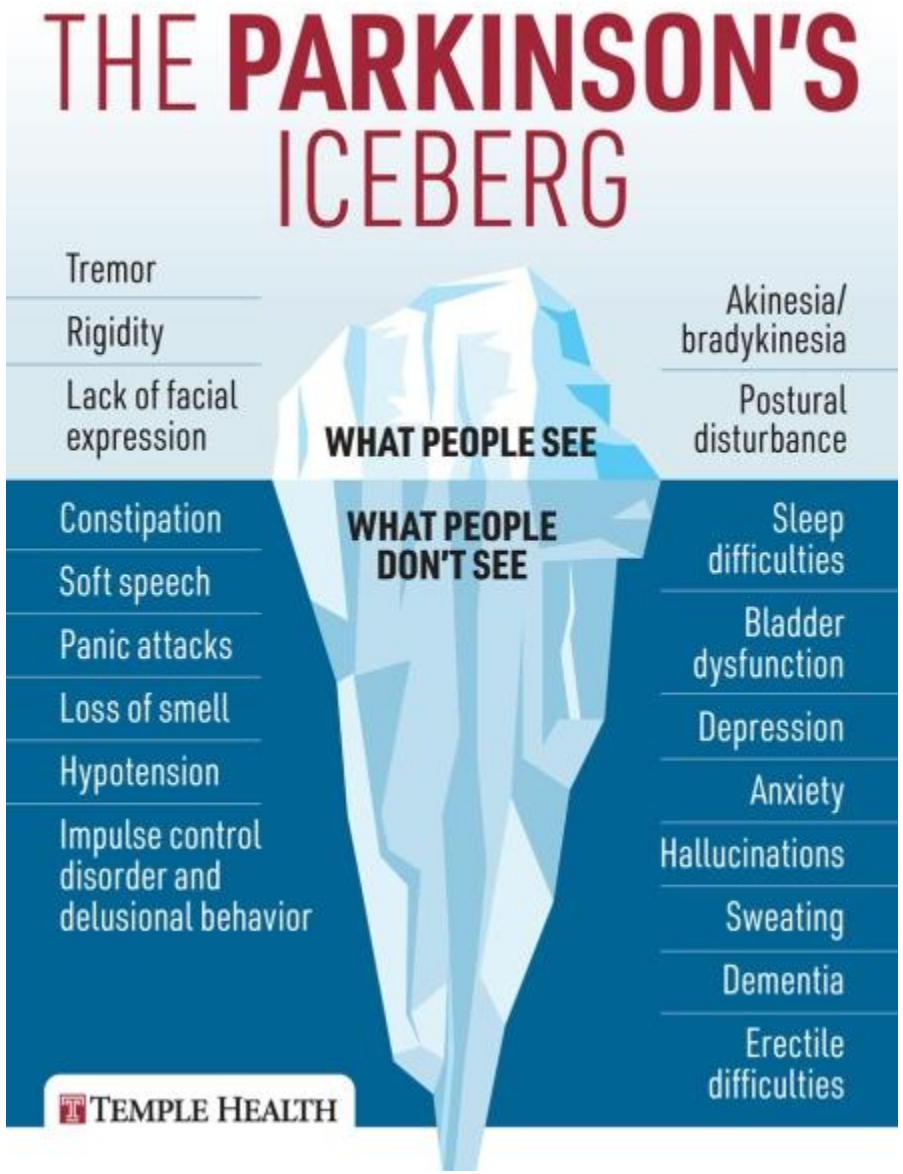
Freezing of Gait – Before & After NexStride (1min)

https://www.youtube.com/watch?v=AQOq5BzeJBI&t=75s



(Nexstride, n.d.)

Non-Motor Symptoms



Emotional - Anxiety

Though worry is an understandable reaction to the diagnosis of Parkinson's, if it turns into anxiety that affects your ability to function and complete your day-to-day activities, it is important to communicate these concerns to your physician.

- Anxiety is more common in people with Parkinson's than the general public
- 50% of people with Parkinson's experience anxiety
- May present as: Jitteriness, nervousness, worry, fear, tension, feeling keyed up
- Many people with Parkinson's find that medication significantly minimizes symptoms
- Relaxation techniques, CBT, proper nutrition, exercise, etc.

(Davis Phinney Foundation, 2022)

Emotional - Depression

Mood disorder - Persistent feeling of sadness and loss of interest
SIGECAPS

- 40-50% of people with Parkinson's experience depression (Davis Phinney Foundation, 2022)

Canadian Guidelines

- Common throughout the course of Parkinson disease, including in early untreated cases
- Clinicians should have a low threshold for diagnosing depression in Parkinson disease
- Preferred Screening Options: GDS & PHQ9
- No best med recommendation can be made – only small studies done.
  - Start low & go slow, with the effective dose often being less than that recommended for the general population
- Electroconvulsive Therapy (ECT)
- Cognitive Behavioural Therapy (CBT)
- Routine, exercise, sleep hygiene, social connections, etc.

(Grimes, 2019)

Emotional - Apathy

Loss of motivation, desire, interest

- May be misinterpreted as laziness, disinterest, or lack of initiative
- May be confused with depression
- Apathy can negatively impact treatment outcomes
  - Ex. You've lost the incentive to take your medicine

Like all the symptoms of Parkinson's, apathy requires that you make active choices to achieve your best quality of life. Strategies:

- Get out of the house daily
- Plan activities ahead of time
- Practice good sleep hygiene
- Get enough sunlight each day

(Davis Phinney Foundation, 2022)

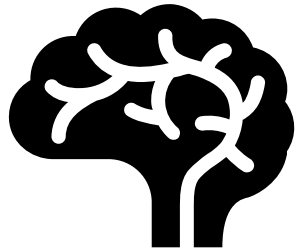
Cognition

- Executive Function (Problem-Solving)
  - A change in the brain's executive function is one of the most common cognitive changes in Parkinson's and can make problem-solving and decision-making very difficult.
- Language (Communication)
  - When under pressure, you may feel frustrated when you try to speak, follow, and understand conversations.
- Speech
  - The most common language problem in Parkinson's is called the "tip-of-the-tongue" phenomenon. You may know what you want to say, but you have difficulty finding the right words to say it, such as naming an object.
- Comprehension
  - May have difficulty following explanations with too many details. Everyday conversations may seem overloaded with information. Your thoughts might get stuck on a single topic, and you may have trouble shifting your thoughts to another.
- Memory
  - May struggle to remember things and to keep your train of thought, or you may zone out in the middle of an activity. This challenge may change from minute to minute or week to week.

(Davis Phinney Foundation, 2022)

Cognition

- Initiate the conversation about cognitive changes early
- Engage in mental exercises
- Build aerobic exercise into daily life
- Remember: Life is a journey, not a destination!
  - Give yourself more time for everyday activities and tasks. You will better manage cognitive changes and challenges if you avoid rushing to complete jobs quickly. Stay present and focus on what is happening in the moment.



(Davis Phinney Foundation, 2022)

Dementia

Parkinson Disease Dementia

- Parkinsonism precedes dementia by at least one year
- Lewy bodies 1st appear in the part of the brain responsible for movement
- ~1/3 of those with Parkinson Disease will develop dementia
- Usually late in the disease
- Increased likelihood in those with an older age of onset / Less common in people with young onset PD (dx before age 50)
- Frequency increases with disease duration

Lewy Body Dementia / Dementia with Lewy Bodies

- Dementia precedes or accompanies the onset of Parkinsonism
- Lewy bodies 1st appear in the part of the brain responsible for thinking

Main symptoms of both:

- Changes in thinking & reasoning
- Fluctuations in thinking & memory
- Visual hallucinations
- Slowness, stiffness, rigidity
- Sleep disturbances

(Alzheimer's Society, 2016; Davis Phinney Foundation, 2022; Grimes; 2019)

Dementia & Medications

Parkinson Disease Dementia or Lewy Body Dementia

- Cholinesterase Inhibitors – Increase the amount of acetylcholine, which is involved in thinking and memory.
  - Donepezil (Aricept)
  - Rivastigmine (Exelon)



- They often have a modest benefit.
- May help reduce freezing of gait.
- Avoid anticholinergic medications

(David Phinney Foundation, ; Grimes, 2019)

Parkinson's Disease Psychosis

Parkinson’s disease psychosis (PDP) is a non-motor symptom of Parkinson’s that causes people to experience hallucinations and/or delusions.

- ~50% of all people living with Parkinson’s will experience some form of hallucinations or delusions
- The longer you live with Parkinson’s, the greater the likelihood you’ll experience them.

Hallucinations

- Visual hallucinations are most common (people and animals)
- Auditory hallucinations are rare

Delusions

- Often paranoid delusions
  - E.g. The belief that their partner is being unfaithful
  - E.g. The belief that their care partner is poisoning them with their medications



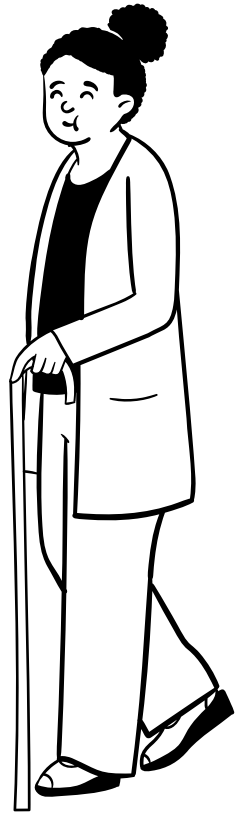
(Davis Phinney Foundation, 2022; Grimes, 2019)

Psychosis

Hallucinations & delusions should not be treated if they are well tolerated

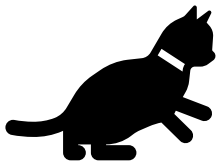
Polypharmacy should be reduced. Suggestions:

- Anticholinergics should be stopped
- Anticholinergic antidepressants (TCAs) should be reduced or stopped
- Anxiolytics or sedatives should be reduced or stopped
- Dopamine agonists should be reduced or stopped
- MAO-B and COMT inhibitors should be reduced or stopped
- Levodopa should be reduced



Anti-Psychotic Medications

- Quetiapine (Seroquel)
- Clozapine (Clozaril)





(Davis Phinney Foundation, 2022; Grimes, 2019)

Impulse Control Disorders

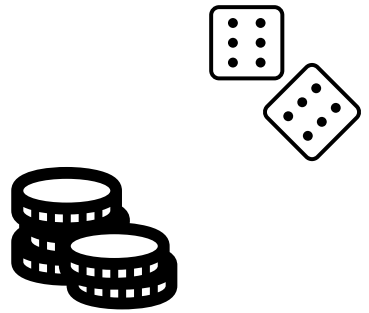
- The perpetuation of repeated negative behaviours regardless of negative consequences
- Progressive lack of control over engaging in these behaviours
- Mounting tension or craving to perform these negative behaviours before acting on them
- A sense of relief or pleasure in performing these problematic behaviours

Risk Factors

- Dopamine Agonists (52% risk)
- Male
- Younger age at diagnosis
- Longer duration living with PD
- Hx of drug abuse or gambling
- Impulsive personality traits
- Family hx of psychiatric disorders
- Depression

Most common ICDs in people with PD:

- Pathological gambling
- Hypersexuality
- Compulsive shopping
- Compulsive eating



(Davis Phinney Foundation, 2022)

Community Resources

- Boxing 4 Health
  - Specialized fitness classes for Seniors & people with PD. In person (Ottawa) & online
  - https://www.boxing4health.com/
- Dancing with Parkinson's Canada
  - Free live dance classes on Zoom 365 days a year + various in person locations
  - https://www.dancingwithparkinsons.com/

https://carefinder.parkinson.ca/

Thank you!

Kaitlyn Borutskie, BScN, MN, RN
Psychogeriatric Resource Consultant (PRC)
613-562-9777 x5255
kborutskie@bruyere.org

Sharon Smith, OT Reg. (Ont.)
Psychogeriatric Resource Consultant (PRC)
613-562-9777 x5263
ssmith@bruyere.org

Geriatric Psychiatry Community Services of Ottawa

Thank you

info@accesscss.ca

accesscss.ca

GENERAL FEEDBACK

PLEASE COMPLETE SURVEY:

LET US KNOW WHAT YOU THINK!

cssshared resources
Ontario East Region

accesscss
Connect to Community Support Services