MEDICATIONS USED IN MANAGEMENT OF DEMENTIA & A BIT ON DEPRESCRIBING

DR. MEGAN SURKAN MD FRCPC

INTERNAL MEDICINE, GERIATRIC MEDICINE

APRIL 20, 2021

LEARNING OBJECTIVES

- 1. Review basics on dementia diagnostic criteria
- 2. Cholinesterase inhibitors: evidence, NNT and NNH, indications, contraindications
- 3. BPSD management: review the evidence for anti-psychotic use in dementia-related behaviours
- 4. Polypharmacy- common medications to deprescribe in older adults with and without dementia: ASA, statins, PPIs and more

1. DEMENTIA DIAGNOSTIC CRITERIA – DSM5 FOR MAJOR NEUROCOGNITIVE DISORDER

- 1) Deficit in 2 of the 6 **cognitive domains**: Memory/learning, Language, Executive Fx, Attention, Visuospatial and Social cognition
- 2) The cognitive deficits must interfere with independence in everyday activities
  - **Functional impairment in at least 1 IADL** (driving, meds, finances highest level ADLs)
  - Crux of a dementia diagnosis is that the patient can no longer do something they used to be able to/ severe enough to impact daily functioning

MNCD DIAGNOSTIC CRITERIA CONT'D

- 3) Abnormal **cognitive testing** that represents a decline from previous level of functioning
  - MMSE $\leq$ 24 (Sn 88%, Sp 83%) $\leq$ 26 if >Gr12 education (MMSE only has 78% Sensitivity in Mild AD whereas MoCA has 100% Sensitivity in early stage disease)
  - MoCA cutoff of 26/30 has 100% Se, 87% Sp
  - Be careful interpreting these numbers in patients with low education, English as a second language or with developmental delay
- 4) Cognitive impairment is not attributable to an alternate medical or psychiatric cause

MNCD - CASE

- Paul is an 80 year old retired accountant
- His spouse tells you that he can't remember to take his medications without frequent reminders and supervision to avoid errors,
- Forgets his PIN number, has made numerous mistakes with the bills, account management and taxes last year
- Can still drive to familiar locations but frequently seems disoriented and needs to be reminded where to turn.
- Seems to have forgotten how his cellphone works.
- Both short term memory impairment and word finding issues have been noticed by family – always asking the same questions, forgetting where he places items and he seems to have no get up and go (apathy). He scores 29/30 on the MMSE and 24/30 on the MoCA (-5 on DR). Does he have dementia?

DEMENTIA MANAGEMENT - NONPHARMACOLOGICAL

- Most common types of dementia: Alzheimer's, Vascular, Mixed, EtoH, Parkinson's Dementia, DLB, FTD
- The mainstay of management is **non-pharmacological**
  - 1) Matching ADL support to need: refer to homecare, move to higher level of care, screening for caregiver burnout, refer to First Link program with Alzheimer's Society
  - 2) Advanced care planning: have patient name a proxy and **make ePOA and ACHP** directive *before* they lose capacity, counselling on prognosis and GOC
    - Progressive degenerative disease of the brain, ave live expectancy 8-10 years before death
  - 3) Safety/Driving*
  - 4) Correct sensory deficits: hearing aides and glasses helpful
  - 5) Exercise to helps slow the loss of ADLs, avoidance of social isolation important
  - 6) Neuropsychiatric symptoms/BPSD management: sometimes medications needed, often they are not

DRIVING IN DEMENTIA

- CMA driver's guide recommends reporting in dementia when 2 iADLs (driving, finances, cooking/meal prep, yardwork and housekeeping) or any 1 bADL (dressing, walking, toileting, eating, bathing/grooming) are affected
- SGI Medical Review Unit will conduct a review and advise if license suspended or if further testing required to decide (In saskatoon or regina the Driver Evaluation Program (DEP) or Driver Assessment Program (DAP), DriveABLE Cognitive Assessment Tool (DCAT) or SGI on-road test)
- Mandatory reporting in Saskatchewan
- SGI MRU reporting form link: https://ssot.sk.ca/assets/main/sgi/2012-SGI-Medical-Reporting-Form.pdf

CASE

Paul has a diagnosis of dementia, Alzheimer's subtype. Severity: Global deterioration scale 4: moderately severe cognitive decline

Weight has been stable, HR 72bpm, normal ECG, no hx of OAB/urge incontinence.

On Amitriptyline 10mg for "sleep" and is interested in a medication that might "slow things down".

You inform him of the diagnosis, tell Paul and his spouse to get to the lawyer's office to make an ePOA, inform SGI and refer to First Link. His wife doesn't feel they need extra help from homecare for now.

Global Deterioration Scale

Stage	Clinical Characteristics
1 - no cognitive decline	Patients appear normal clinically. No complaints of memory deficit. No memory deficit evident on clinical interview.
2 - very mild cognitive decline	Patient complains of memory deficit, most frequently with: (a) forgetting where they have placed familiar objects; and (b) forgetting names they formerly knew well. No objective evidence of memory deficit on clinical interview. No objective deficits in employment or social situations. Patient displays appropriate concern about their symptoms.
3 - mild cognitive decline	Earliest clear-cut deficits. Objective evidence of memory deficit obtained only with an intensive interview conducted by trained geriatric psychiatrist. Concentration deficit may be evident on clinical testing. Patient may demonstrate decreased facility in the following: (a) remembering names upon introduction to new people; and (b) retaining information after reading a passage from a book. Decreased performance becomes manifest in demanding employment and social situations. Examples can include the following: (a) co-workers become aware of the patient's relatively poor performance; (b) difficulties in finding words and names may become evident to intimates; (c) may lose or misplace an object of value; and (d) getting seriously lost when traveling to unfamiliar locations. Subtlety of the clinical symptoms may be increased by denial that often becomes manifest with these patients. Mild to moderate anxiety also accompanies the symptoms, typically when patient is forced to cope with challenging employment and social demands they find they can no longer negotiate.
4 - moderate cognitive decline	Clear-cut deficit on careful clinical interview. Deficits manifest in many areas, such as: (a) concentration deficit elicited on serial subtractions; (b) decreased knowledge of current events and recent life events; (c) upon careful questioning, may exhibit a deficit in memory of their personal history; and (d) decreased ability to travel alone, manage finances. Patients can no longer perform complex tasks accurately and efficiently; however, certain abilities remain preserved, such as: (a) orientation to time and person; (b) familiar persons and faces distinguished from strangers; and (c) travel to familiar locations. Denial is often dominant defense mechanism. The evident decline in one's intellectual and cognitive capacities is too overwhelming a loss for full conscious acceptance and recognition. A flattening of affect and withdrawal from previously challenging situations are observed.
5 - moderately severe cognitive decline	Patient can no longer survive without some assistance. During interviews they are unable to recall a major relevant aspect of their current lives. Examples include: (a) difficulty recalling their address or telephone number, names of close family members, such as grandchildren, or the name of their high school or university they graduated from; (b) somewhat disorientation to time (date, day of the week, season) or to place; and (c) a well-educated patient may have difficulty counting backward from 40 by 4s or from 20 by 2s. Patients retain knowledge of many major facts regarding themselves and others. They invariably know their own names and generally know their spouse and children's names. They require no assistance with toileting and eating, but may have some difficulty choosing the proper clothing to wear and may occasionally clothe themselves improperly (e.g., put their shoes on the wrong feet).
6 - severe cognitive decline	May occasionally forget the name of their spouses, on whom they depend entirely for survival. Largely unaware of all recent events and experiences in their lives. Retain some knowledge of their past lives but this is very sketchy. Generally unaware of their surroundings, the year, or the season. May have difficulty counting from 10, both backward and, sometimes, forward. Will require substantial assistance with activities of daily living. For example, may become incontinent, will require travel assistance but occasionally will be able to travel to familiar locations. Diurnal rhythm frequently becomes disturbed. Patients almost always recall their own name and continue to be able to distinguish familiar from unfamiliar persons in their environment. Personality and emotional changes occur. These are quite variable and include: (a) delusional behaviour (e.g., patients may accuse their spouse of being an impostor, may talk to imaginary figures in the environment, or to their own reflection in the mirror); (b) obsessive symptoms (e.g., continual repetition of simple cleaning activities); (c) anxiety symptoms, agitation, and previously nonexistent violent behaviour; and (d) cognitive abulia (i.e., loss of willpower because an individual cannot carry a thought long enough to determine a purposeful course of action).
7 - very severe cognitive decline	All verbal abilities are lost. Frequently there is no speech at all, only grunting. Patients are incontinent of urine and require assistance in toileting and eating. Lose psychomotor skills. For example, they lose the ability to walk. The brain appears to no longer be able to tell the body what to do. Generalized cortical and focal neurologic signs and symptoms are frequently present.

Reference: Reisberg B, Ferris SH, Leon MJ, et al. The global deterioration scale for assessment of primary degenerative dementia. Am J Psychiatry.

PHARMACOLOGICAL MANAGEMENT

ACETYLCHOLINESTERASE INHIBITOR – REVERSIBLE INHIBITORS OF ENZYME ACETYLCHOLINESTERASE

- Donepezil (Aricept) 2.5, 5mg, 10mg doses
  - Depending on the patient starting dose 2.5mg daily x2 weeks then increase to 5mg if more frail,
    - otherwise start at the regular dose 5mg for 2 weeks then increase to 10mg daily (full dose)
  - $t_{1/2}$ =72 hours, doesn't matter if take dose in morning or evening
  - All 3 ChE inhibitors considered equivalent (Donepezil, Rivastigmine, Galantamine), choose one
  - $37/month ($178/yr generic) with no coverage
  - To apply for EDS: Need MMSE 10-26 and FAQ (Functional Activities Questionnaire, scored out of 30), say it is Alzheimer's subtype, re-evaluate q6m
  - To continue coverage must not have both a 2-pt drop in MMSE and 1-pt increase in FAQ in 6months
  - Stop all anti-cholinergic medications prior to starting ChE inhibitor* e.g. paroxetine, amitriptyline, fesoteridine

SO HOW WELL DO THEY WORK? EVIDENCE FOR EFFICACY

- Generally poor efficacy, should never be spoken of as a "treatment" for dementia
  - No evidence that shows that cholinesterase inhibitors are neuroprotective or have the ability to alter the underlying disease trajectory. The dementia will march on
  - The hope is that the ChEinh will provide small improvements in cognition, neuropsych symptoms and activities of daily living. Tend to work best (give a boost) for those with apathy
  - Largest study we have (Cochrane 2006 by Birks) showed that ChEinh resulted in a **2-3 point improvement in the 70-point ADAS-Cog test after 12 months** vs placebo in mild to mod AD.

EFFICACY OF CHOLINESTERASE INH CONT'D

- Evidence says it slows down need to move to a facility/nursing home by a matter of **months, not years**
  - **AD2000 Study:** Did 5 years of Aricept impact two hard endpoints? 1) entry to institutional care and 2) progression of disability → No, did not show a benefit
  - Another study (Trinh JAMA 2002) estimated that ChEinh resulted in slower progression in the name of 2-months per 12-months on treatment (after 6 years on treatment, the patient would have gained an extra 12 months in slowing down progression of ADL decline

EFFICACY OF CHOLINESTERASE INH CONT'D

- **Cholinesterase inhibitor NNT for improvement in cognition (cog testing scores) and ADL:**
  - NNT = 7 for stability
  - **NNT = 12 for minimal improvement*. Similar to NNH of 12**
  - NNT = 42 for marked improvement
- **1/3-1/3-1/3 rule → response varies** – literature suggests 30-50% of patients have no observable benefit, up to 20% have greater than average benefit (up to 7-point increase on 70-pt ADAS-Cog) and ~30% stop due to intolerable side effects.
  - In practice, we tell patients the 1/3 rule: 1/3 benefit, 1/3 see no difference and 1/3 just get side effects and have to stop
- Benefit greater in alpha-synucleinopathies (Parkinson's Dementia and Lewy Body) – ChEinh reduce visual hallucinations, often reduce the marked fluctuations in alertness seen, is one of the few times I'll push for a ChE trial

ADVERSE EFFECTS OF CHOLINESTERASE INHIBITORS

- **Side effects**
- **NNH is only 12** for any adverse event, most commonly:
- Nausea, appetite loss, vomiting, diarrhea - usually last 2 weeks then improve.
- Can induce agitation/insomnia and vivid dreams in some.
- Weight loss, bradycardia, new fecal incontinence and severe urinary urge incontinence not uncommon
  - For patients on pharmacotherapy for urge incontinence/OAB, often a decision needs to be made whether to treating the bladder or the brain will have greater benefit on QoL. The bladder usually wins

RELATIVE CONTRAINDICATIONS

- Bradycardia, sick sinus syndrome, LBBB on ECG (caution if the patient is on beta blockers)
- Severe COPD/Asthma (e.g. Spiriva works via anti-cholinergic mechanism to dilate airways)
- Weight loss/cachexia
- Seizure disorder history: ChEinh lower the seizure threshold (as do SSRIs)
- Cost: if EDS does not cover, is the family/patient able to spend $40 a month for Aricept?
- Agitation/aggression: ChE inh are stimulating and often make agitation worse
- Severe urinary urge incontinence/OAB
- *Frontotemporal Dementia: ChEinh contraindicated; SSRI is mainstay of treatment
- Advanced disease: If severe stage/requiring LTC, ChEinh not helpful. Deprescribing Aricept for those being admitted to LTC is reasonable (taper over 4 weeks, ↓ dose from 10mg to 5mg x2w then 2.5mg x 2w then stop)

EDS FORM

Saskatchewan

Government of Saskatchewan

Drug Plan & Extended Benefits Branch

3475 Albert Street
Regina SK S4S 6X6

1-800-667-7581 Phone
306-798-1089 Fax

Exception Drug Status Application
ARICEPT/EXELON/REMINYL

You should complete this form if:

- ✓ You would like to apply on behalf of a patient for Exception Drug Status coverage for Aricept, Exelon, or Reminyl
- ✓ You would like to renew Exception Drug Status coverage for Aricept, Exelon, or Reminyl

When completing this form you should be aware that:

- ✓ All sections must be completed in order to allow this request to be processed. Click here to access Appendix A of the Formulary for detailed criteria.
- ✓ New patients who meet criteria will be approved for a 3 month treatment period. For renewal after the 3 month period, patients must exhibit an improvement from the initial MMSE or FAQ (i.e.; increase of at least 2 points on MMSE or a decrease of at least 1 point on the FAQ).
- ✓ Existing patients who meet the criteria will be approved for a 6 month period. After the 6 month period, patients who demonstrate a decline in both the FAQ and MMSE scores (i.e.; an increase of 1 or more points on the FAQ and a decrease of 2 or more points on the MMSE) will not be renewed.

1. Patient Information

Patient Surname:	Patient First Name:	Health Services Number:	Date of Birth:
Patient Address (Street, City, Province, Postal Code):			

2. Drug Request

DRUG REQUESTED: (Check One):

☐ **ARICEPT** (Donepezil) ☐ **EXELON** (Rivastigmine) ☐ **REMINYL** (Galantamine)

THIS PATIENT IS (Check One):

☐ **NEW PATIENT** (Not currently taking the medication)

☐ **EXISTING PATIENT OR RENEWAL** (Currently taking the requested medication)

SWITCHING MEDICATION DUE TO: ☐ **INTOLERANCE** ☐ **FAILURE TO RESPOND**

3. MMSE Score / FAQ Score

(Date within 60 days of first application. Not greater than 1 month before current EDS expiry date.)

RECENT MMSE SCORE (10 to 30)	DATE OF MMSE SCORE	FAQ SCORE	DATE OF FAQ SCORE

4. Prescriber Validation (All answers must be "YES" in order to submit Application for EDS Assessment)

I HAVE VERIFIED THAT:		
This patient has been diagnosed with probable Alzheimer's disease as per DSM-IV criteria.	☐ YES	☐ NO
The patient has a recent MMSE Score between 10-26 (new patient) or 10-30 (for existing patient).	☐ YES	☐ NO
Date of recent MMSE Score is within 60 days (new patient) or not greater than 1 month from EDS expiry (existing patient).	☐ YES	☐ NO
Drugs with anticholinergic activity were discontinued within 14 days before the MMSE and FAQ were administered.	☐ YES	☐ NO
Drugs with anticholinergic activity will not be used concurrently with Aricept, Exelon or Reminyl. Link to: SFC Quarterly Update Bulletin (#86) April 2001	☐ YES	☐ NO

Prescriber Name:	Prescriber Address:
Prescriber Signature:	Prescriber Telephone Number:
Date Signed:	Prescriber Fax Number:

FAX REQUEST TO (306) 798-1089 OR MAIL TO 3475 ALBERT STREET, REGINA SK S4S 6X6

CASE: PAUL

- Paul has no contraindications for Aricept – you prescribe 5mg for 2 weeks then 10mg daily. He has some diarrhea and nausea for the first week which then resolves. His wife has noticed his "get up and go" improved and but not much else.
- On a practical note:
  - 1) ***safe medication adherence** is a concern with Paul given short term memory deficits – I would only prescribe Aricept if he was agreeable to having his wife take over his med management or agreed to blisterpacks with supervision. No sense prescribing medications if doses are being missed or doubled up.
  - 2) I would also only prescribe Aricept after discontinuing his Amitriptyline. Having patients on anticholinergic medication then prescribing a cholinergic is counter-intuitive

WHAT ABOUT MEMANTINE

- NMDA Antagonist, Ebixa, $t_{1/2}$ 80hrs
- Generally better tolerated than ChEinh, not effective in mild disease (used for moderate/severe stage)
- Cost a significant barrier (no EDS coverage, some coverage through private plans)
- 5mg daily in the morning then increase to 5mg BID (usual dose, $67/month). Can increase by 5mg every week up to a max dose of 20mg/d
- Dizziness, headache, HTN, sometimes sedation are most common side effects (less so at 5mg BID dose). Avoid if uncontrolled hypertension or seizure hx
- DOMINO-AD trial looked at combining Aricept and Ebixa – is reasonable as have different mechanisms, weak evidence that combo may be better than ChEinh alone. In practice, I have never combined them as at this stage usually patients are requiring LTC and are in an advanced state of irreversible decline

QUESTIONS/COMMENTS SO FAR?

MANAGEMENT OF NEUROPSYCHIATRIC SYMPTOMS IN DEMENTIA

- AKA BPSD (Behavioural and Psychological Symptoms in Dementia)
- AKA **Responsive Behaviours → unmet care need**

EXAMPLES OF BPSD – 6 MAIN SYMPTOM CLUSTERS

- 1) **Apathy**: lack of interest, amotivation, withdrawn *very common, distinct from true depression (patient not bothered by it, denies sadness)
- 2) **Psychosis***: paranoia, delusions, suspicion, hallucinations, misidentification
  - Medications generally indicated and most effective
- 3) **Aggression**: verbal or physical (grabbing, biting, hitting, kicking, spitting, throwing items), resistance to care, defensiveness, hostility, disinhibition
- 4) **Agitation**: anxiety, restlessness, fidgeting, rummaging, repetitive actions (hoarding, pacing, vocalizations)
- 5) **Depression:** emotional lability, hopelessness, irritability, sad/tearful, guilt
- 6) **Mania**: euphoria, pressured speech, hyperactivity

CERTAIN BEHAVIOURS DO NOT RESPOND TO MEDICATION – APPROACH TO CARE IS 1ST LINE TX

- 1) Wandering or exit seeking behaviour
- 2) Vocalizations or calling out
- 3) Resistance to care (hitting, shoving with personal care)
- 4) Interfering with other residents
- 5) Inappropriate dressing/undressing
- Non-pharmacological interventions are actually more effective – Watt 2019
  - Label the behaviour specifically
  - Document patterns – what time of day is behaviour occurring, what happens immediately before, identify triggers and what has been tried & worked to redirect/stop the behaviour

Annals of Internal Medicine

REVIEW

Comparative Efficacy of Interventions for Aggressive and Agitated Behaviors in Dementia

A Systematic Review and Network Meta-analysis

Jennifer A. Watt, MD, PhD; Zahra Goodarzi, MD, MSc; Areti Angeliki Veroniki, PhD; Vera Nincic, PhD; Paul A. Khan, PhD; Marco Ghassemi, MSc; Yuan Thompson, PhD; Andrea C. Tricco, PhD; and Sharon E. Straus, MD, MSc

Background: Both pharmacologic and nonpharmacologic interventions are used to treat neuropsychiatric symptoms in persons with dementia.

Purpose: To summarize the comparative efficacy of pharmacologic and nonpharmacologic interventions for treating aggression and agitation in adults with dementia.

Data Sources: MEDLINE, EMBASE, Cochrane Central Register of Controlled Trials, CINAHL, and PsycINFO between inception and 28 May 2019 without language restrictions; gray literature; and reference lists scanned from selected studies and systematic reviews.

Study Selection: Randomized controlled trials comparing interventions for treating aggression and agitation in adults with dementia.

Data Extraction: Pairs of reviewers independently screened studies, abstracted data, and appraised risk of bias.

Data Synthesis: After screening of 19 684 citations, 163 studies (23 143 patients) were included in network meta-analyses. Analysis of interventions targeting aggression and agitation (148 studies [21 686 patients]) showed that multidisciplinary care (standardized mean difference [SMD], −0.5 [95% credible interval {CrI}, −0.99 to −0.01]), massage and touch therapy (SMD, −0.75 [CrI, −1.12 to −0.38]), and music combined with massage and touch therapy (SMD, −0.91 [CrI, −1.75 to −0.07]) were clinically more efficacious than usual care. Recreation therapy (SMD, −0.29 [CrI, −0.57 to −0.01]) was statistically but not clinically more efficacious than usual care.

Limitations: Forty-six percent of studies were at high risk of bias because of missing outcome data. Harms and costs of therapies were not evaluated.

Conclusion: Nonpharmacologic interventions seemed to be more efficacious than pharmacologic interventions for reducing aggression and agitation in adults with dementia.

Primary Funding Source: Alberta Health Services Critical Care Strategic Clinical Network. (PROSPERO: CRD42017050130)

Ann Intern Med. 2019;171:633-642. doi:10.7326/M19-0993 **Annals.org**
For author affiliations, see end of text.
This article was published at Annals.org on 15 October 2019.

NONPHARM APPROACH FOR BPSD 101 – ABC PIECES

- **A – Antecedents**
- **B – Behaviour**
- **C – Consequences**
- Document **what happened before** the behaviour (such as morning care, or transfer to sitting up in chair, or unprovoked), details of the specific behaviour (verbal aggression, physical aggression, vocalizations, calling out, wandering, etc) and what happened after the behaviour (consequences)
- **Look for patterns** after recording the behaviour several times

Example of behavioural charting – essentially when reading through the nursing notes or talking to LTC staff ask them to document time of day and observe for patterns until SK can implement a standardized charting tool

Alberta Health Services

Behaviour Mapping Chart

Last Name (Legal) | First Name (Legal)

Preferred Name ☐ Last ☐ First | DOB (dd-Mon-yyyy)

PHN | ULI ☐ Same as PHN | MRN

Administrative Gender ☐ Male ☐ Female ☐ Non-binary/Prefer not to disclose (X) ☐ Unknown

Date (yyyy-Mon-dd)														
Time	Obs.	Init	Obs.	Init	Obs.	Init	Obs.	Init	Obs.	Init	Obs.	Init	Obs.	Init
00:00														
01:00														
02:00														
03:00														
04:00														
05:00														
06:00														
07:00														
08:00														
09:00														
10:00														
11:00														
12:00														
13:00														
14:00														
15:00														
16:00														
17:00														
18:00														
19:00														
20:00														
21:00														

Behaviour Mapping

Goal
Creation of a personalized Behavioural Support Plan including behavioural trends, triggers and effective interventions.

Steps:
(1) **hourly observations** *(behaviour mapping chart)*
(2) **descriptive notes** *(patient progress record)*. **Both observations and descriptive notes** should be used to create the Behavioural Support Plan and to keep it consistently updated. Begin creating the Behavioural Support Plan upon initiating the behaviour mapping process.

1 — HOURLY Behaviour Observation
✓ Chart entry is letter(s) only. If an observed behaviour is notable, further detail is required *(Step 2)*.

A	**Agitation**: Refusing/Resistant to care; Calling out; Removing clothes
AF	**Affect**: Anxious; Paranoid; Sad; Depressed; Happy; Cooperative
AG	**Aggression** *(Verbal or Physical)*: Biting; Spitting; Kicking; Hitting; Pinching; Yelling
H	**Hypoactive**: Drowsy; Somnolent; Comatose; Unusually quiet compared to typical
Q	**Quiet**: Alert, Awake
R	**Restlessness**: Fidgeting; Impulsive activity; Pacing
S	**Sleeping**
SD	**Sexual Disinhibition**: Exposing; Inappropriate touching; Inappropriate comments
SEN	**Sensory**: Hallucinations *(Visual/Auditory)*; Delusions; Suspicious; Picking
W	**Wandering**: Redirectable; Difficult to redirect; Exit seeking; Elopement Risk
O	**Other**:

2 — DESCRIPTIVE NOTE *(entered in the patient's progress record)*
✓ On the Behaviour Mapping Chart, circle the letter identifying the notable behaviour. This indicates descriptive information has been provided. **Follow these prompts** below to create your descriptive note.
✓ If focus charting, the focus word is "Behaviour Mapping" to easily identify corresponding descriptive notes.
✓ Describe notable behaviours only. *("Routine" entries are not necessary).*

Examine the event to try to understand it - look for *"triggers"*

(A) ACTIVATING EVENT
Assess if the behaviour is the result of:
- **Delirium** *(complete CAM)*
- **Care provider approach?** *(e.g. Was patient startled? Crowded? Rushed?)*
- **Clinical/medical factors?** *(e.g. Constipation; Pain; Depression; Apathy; Medication effects)*
- **Environmental factors?** *(e.g. Noise; Too hot/cold; Change in routine or location; Light; Over / Understimulation; Restraint)*
- **Unmet needs?** *(e.g. Hunger/thirst; Fatigue; Boredom; Loneliness; Need for increased Comfort Rounds?)*

Include
- Where did the behaviour occur? *(Specific location)*
- Who was present? Identify by name and role. *("John S, LPN" vs "LPN")*

(B) BEHAVIOUR
- What behaviour was observed? *(Be specific. e.g. "While seated for lunch, Mrs. B refused to eat. She was muttering but her words could not be understood. When John S, LPN asked what she would like she yelled 'Go away!' and threw her coffee cup at him.)*

(C) CONTEXT
- Staff response/intervention to the behaviour?
- Patient's response to the staffs intervention?

Behavioural Support Plan
✓Examine the chart for trends at specific times/days, with specific activities or care providers, etc.
✓Examine descriptive notes for triggers and effective interventions. Consider events prior to behaviours. *(e.g. Nightly sedation may actually contribute to insomnia, as might a long nap the prior afternoon).*
✓Suggested inclusions: Likes/Dislikes; Triggers; Effective interventions; Patient's preferred routine; Safety
✓Care plan should be kept in a location accessible to all caregivers and must be reviewed regularly

NOTE: Descriptive notes may be done for the ABSENCE of responsive behaviours. *(e.g. It is notable if a patient who is routinely agitated at meals appears content today. Complete a note to understand what is different today).*

19895(Rev2020-12)

NON-PHARM APPROACH TO BPSD - PIECES

PIECES		
Physical	Pain* Hunger/Thirst, **Unmet care needs** Delirium Constipation/ fecal impaction Urinary retention	**Schedule Tylenol** 1g TID esp if patient is agitated with transfers Monitor PO intake. Provide snacks R/O medical causes – labs, CXR, etc PVRs, scheduled toileting, **schedule PEG 17g daily**
Intellectual	BOREDOM/lack of stimulation Behaviours related to dementia itself (e.g. day-night reversal, impaired receptive and expressive abilities with language, misinterpretations)	Redirect, don't correct (distraction with care, switching subject/task if patient becoming wound up or agitated). Calm tone, simple instructions, reassurance with care. Finding something for them to do: magazines, folding towels, music, pet therapy, family visits, group activities **Melatonin 3-6mg Qhs** for day-night reversal
Emotional	Mood alterations, apathy, sadness, loneliness	Over/understimulation ***Ensure patients can hear + see** – they might be hitting bc they can't hear anyone approaching and get startled

PIECES CONT'D

Capabilities		Allow the person with dementia choice (appropriate to the severity of their disease)
Environment		Relocation Change in routine Noise
Social	Knowing the patient's background – previous jobs, temperament, cultural heritage, prior traumatic experiences – is very relevant to figuring out why they are acting the way they are in dementia – retrograde memory loss	Thorough social history

IN SUMMARY - NONPHARM

- You can't start a medication until you can specifically describe what behaviour you are targeting (what, when, why) and tried to identify root causes (pain, full bladder, boredom, etc)
  - Start by asking the nursing staff for more information, more thorough charting and reassess in a few weeks, don't feel pressured to start a medication immediately. Education of staff that nonpharmacological interventions are more effective is important. E.g. agitation from a full bladder and a sore back won't get better with Seroquel
- Determine if the symptom is severe enough to require treatment
  - If the behaviour is present but not problematic, it doesn't warrant the risks of a medication. E.g. Hallucinations or delusions that do not cause distress to the patient shouldn't be treated. If they are hallucinating that they are talking to an imagined family member, no need to treat. If they imagine people are persecuting them, stealing from them or poisoning them (refusing to eat or take meds) this warrants Rx

WHY ALL THE FUSS ABOUT AVOIDING MEDICATIONS? SIDE EFFECTS OF ANTIPSYCHOTICS

- Antipsychotics increase the risk of death by 1.6 times (OR 2.40 at 90 days vs placebo) via stroke and cardiac arrest (QTc prol)
  - DART-AD trial: showed stopping antipsychotics in BPSD after 3 months (switched to either placebo or to continue antipsychotic) **reduced mortality by 25%** at 2 years – 71% of placebo group still alive vs 46% antipsychotic group; NNT for discontinuation = 4 at 2 years to prevent 1 death.
- Increase risk of aspiration pneumonia by 60%! (Herzig 2017 J Am Geriatr Soc)
- Parkinsonism – tremor, rigidity, stooped shuffling gait. Do not use in Parkinson's or Lewy Body (only low dose Seroquel in these patients)
- ↑ fall and fracture risk
- Sedation, akathisia (restlessness caused by the antipsychotic itself, only at higher doses)
- Acute urinary retention

WHEN YOU NEED TO TRY MEDICATION

- Dementia is a progressive degenerative disease- medication can serve as a means of prioritizing quality of life in a palliative disease especially when BPSD is moderate to severe and distressing to the patient
- Review q3months to see if the behaviour is still warranting Rx.
- R/A all meds if pt suffers a **fall**
- Prove that they need medication by trying to wean/stop: If you have a patient who has been on antipsychotics (or antidepressants) for a long time reduce the dose and R/A
- If the patient has a prior psychiatric history of schizophrenia/schizoaffective this is a true indication to continue antipsychotics.

CHOOSING MEDICATIONS

- 1) **Risperidone** – for psychotic Sx
  - 0.25mg BID starting dose, increase to 0.5mg BID (max dose 2mg/day)
  - 1st choice when the patient has true paranoia, delusions or hallucinations
- 2) **Quetiapine** – more sedating, for agitation/aggression. Causes Uretention, hypotension
  - Should never be used purely for sleep
  - If sundowning or day-night reversal try Melatonin 3-6mg first
  - $t_{1/2}$ is only 6-8hrs – the most common error with Quetiapine is dosing too infrequently. E.g. 12.5mg TID usually better than 50mg qHs. Time the dosing 2hrs prior to time of day that behaviour is occurring. Max dose for frail elderly 150-200mg/day
  - Quetiapine is the best/only option in Parkinson's or Lewy Body dementia, lowest risk of EPS (rigidity) vs other atypicals

ANTIPSYCHOTICS CONT'D

- 3) **Haloperidol**
  - Should only be used as a last resort when IM route required PRN. Appropriate dose is 0.25-0.5mg IM x1. Repeat up to 3 doses q15-30minutes. Do not exceed 2mg per day, increased risk of death
- 4) **Olanzapine**
  - 1.25, 2.5, 5mg. Up to 5mg BID
  - The most sedating and anti-cholinergic (dry mouth, orthostatic BP drops, sedating, urinary retention, constipating) of all the options. Will sometimes use in younger patients for whom weight gain is desirable with hyperactive behaviours (mild sedation is desired effect). Often add low dose as an adjunctive to Sertraline in behavioural variant frontotemporal dementia

MEDICATIONS CONT'D

- 5) **Mirtazapine**
  - 3.75mg (if <50kg, very frail), 7.5mg, 15mg (max dose)
  - Best for patients that are depressed (irritability, sad/tearful, loss of interest, may be expressing desire to die), and not sleeping or eating well
  - Above 15mg dose less histaminergic effects (stimulating rather than sedating)
  - Dry mouth, over-sedation most common side effects
- 6) **Trazadone**
  - Sedating, non-antipsychotic. NOT any safer than antipsychotics (equivalent fall/fracture risk)
  - May be used as adjunctive in Parkinson's or Lewy Body dementia as will not cause rigidity (no dopamine blocking effects) but not infrequently causes Uretention and orthostatic hypotension in patients. 12.5mg-50mg max dose

MEDS CONT'D

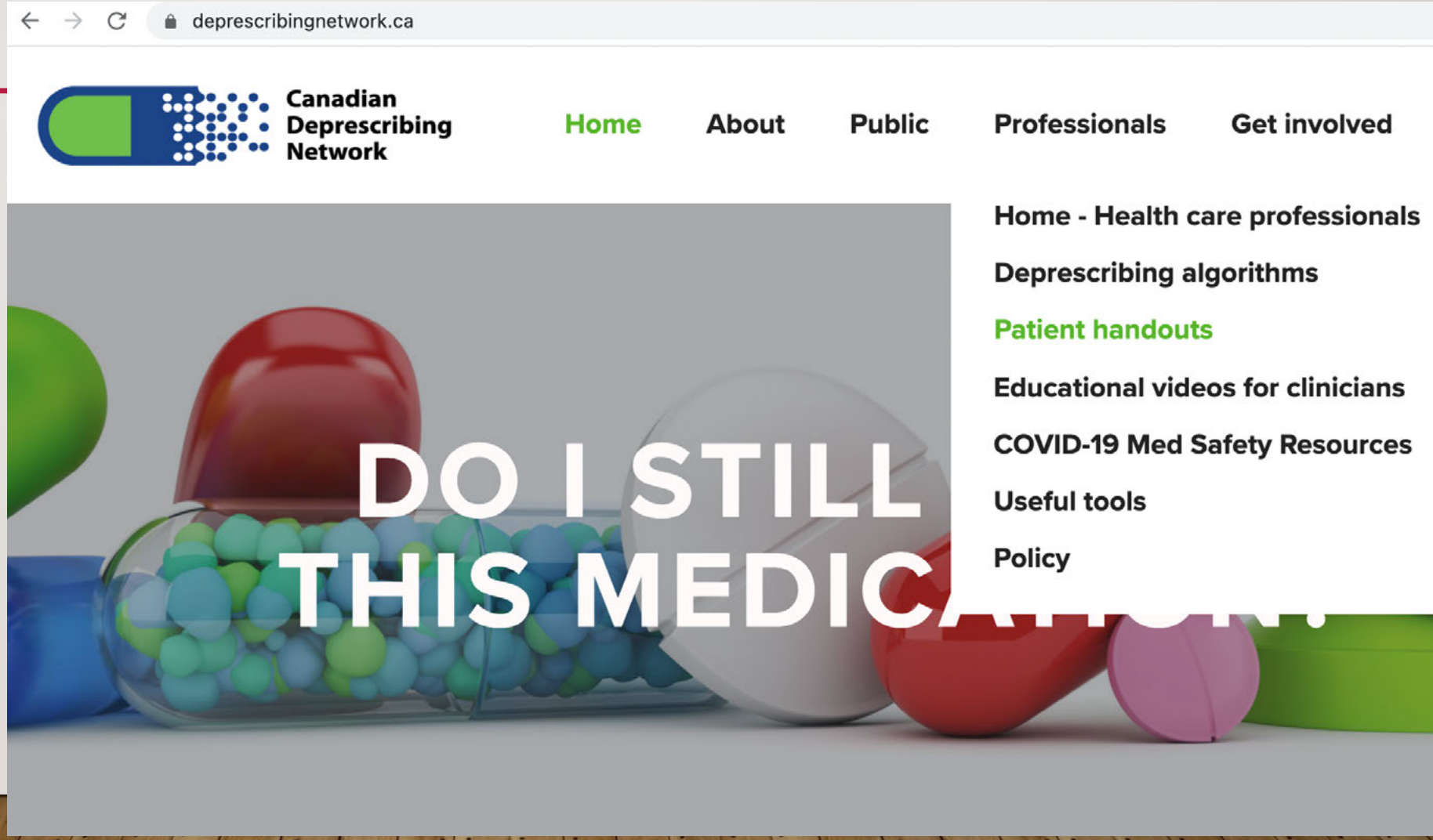
- 7) SSRIs – **Escitalopram (2.5-10mg max dose), Sertraline** (25-100mg max dose)
  - In general antidepressants less effective in dementia (abnormal brain to work with)
  - Use in emotional lability, severe anxiety (GAD), OCD-like behaviours.
  - AE: Hyponatremia (SIADH), QTprolong, falls linked to SSRIs as are GI bleeds

ADDITIONAL DEPRESCRIBING TIPS – NOT JUST FOR DEMENTIA

- **Individualized BP targets** in dementia and frailty
  - BP below 140 accelerates progression in dementia. **Target sBP 150-160mmHg** in moderate stage to advanced dementia → Stop/lower the dose on hypertension Rx
- **Diabetes HgbA1C 8-8.5% is the target**. Sugars of 8-18 are fine, avoid SGLT2inh in those whom weight loss is a concern and Glicazide in inconsistent eaters who often refuse meals (hypoglycemia risks)
- **ASA and Statins** for primary prevention: stop these (in all older pts not just dementia)
- **PPIs**: unless Barrett's, prior severe esophagitis, or on triple therapy or steroids stop the PPI – reduce to EOD for 2 weeks then stop/change to PRN. A remote GI bleed is not a reason to continue
- Antidepressants/antipsychotics/benzos/zopiclone (**anything that increases fall risk**): as dementia progresses falls will become more common, hip fractures are a common route of demise (25-30% 1 year mortality after a hip fracture!). Pls assess med lists to stop/reduce dose of medications known to cause falls

DEPRESCRIBING RESOURCE – DEPRESCRIBINGNETWORK.CA

- Fantastic resource for general info, patient handouts to send them home with, sleep diary, much more



DEPRESCRIBINGNETWORK.CA

Are sleeping pills really worth it? Let's compare:

Benefits

1 person out of 13
will experience one of the benefits below.

Extra sleep:
approx. 35 minutes

Getting to sleep faster:
14 minutes

Harms

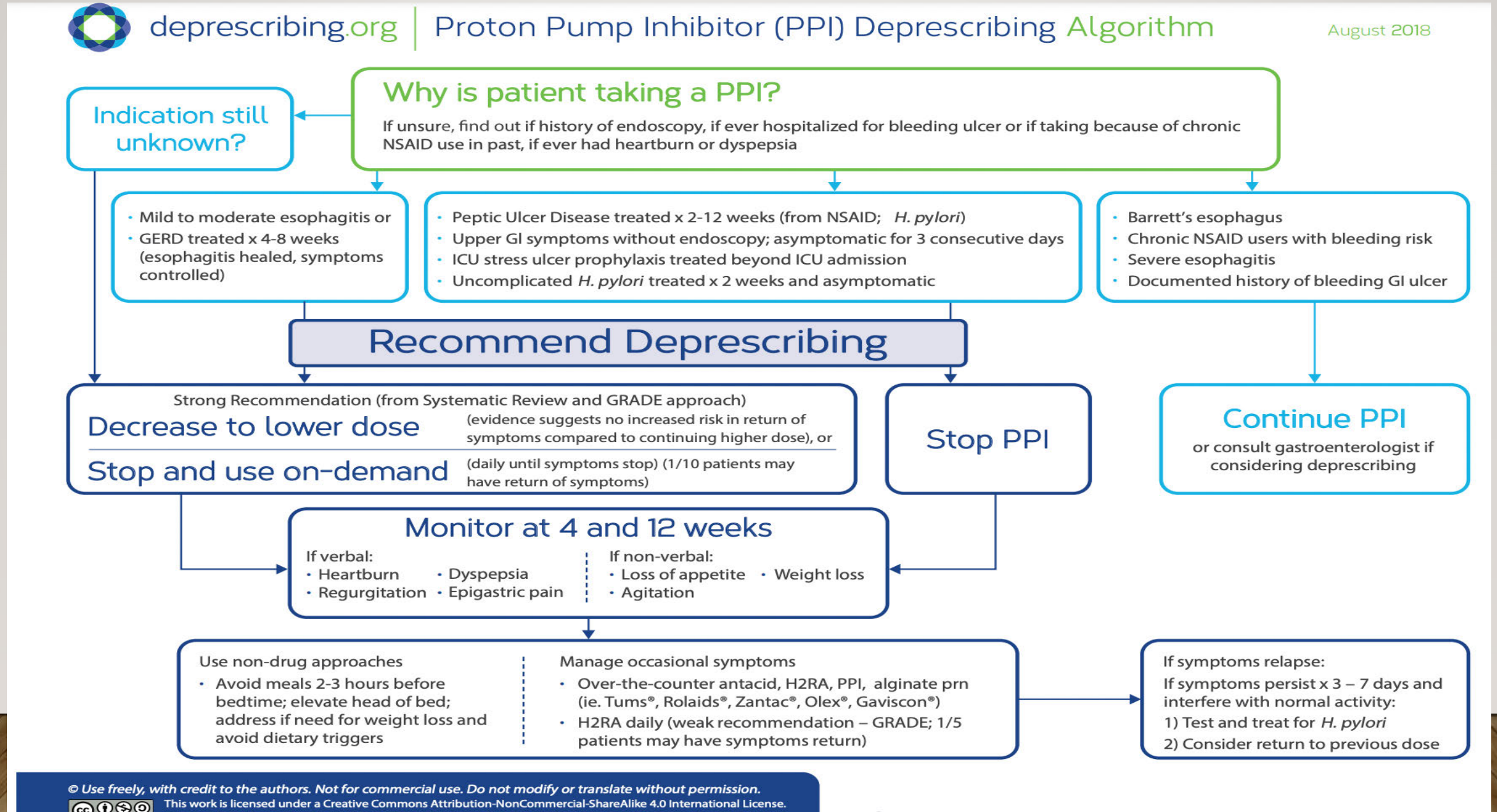
1 person out of every 6
will be harmed. This includes delayed reaction time and impaired cognition.

+50%
increase in falls

2X
increase in hip fractures

Driving:
equivalent to a blood-alcohol level of 0.06-0.11%

DEPRESCRIBINGNETWORK.CA. - PPI



SUMMARY

- Cholinesterase inhibitors generally should be offered to all patients with Alzheimers, vascular or mixed dementia
- 1/3-1/3-1/3 rule: in most they don't work very well, in a small few the benefits are noticeable
- BPSD is very common in dementia – nonpharm treatment is more effective and 1st line for all, if symptoms are moderate to severe and affecting QoL, medications can be used cautiously
- Select the drug and time of day of the drug based on the symptom you are targeting – requires behavioural mapping
- Tylenol TID, scheduled melatonin, daily Lax-a-day, snacks, hearing aides, glasses and tasks to lessen boredom should all be considered when looking at using an antipsychotic
- Prove they need it – trial dose reduction/stopping for longtime users of psych medication (esp with unknown rationale for ever starting it). There is robust data that stopping antipsychotics is beneficial (DART-AD trial)
- ↓ pill burden and ↓ fall risk in all dementia patients by targeting appropriate blood pressure, AIC and D/Cing meds known to cause falls (especially if they are already falling!)

QUESTIONS