

Primary Care – Dementia Assessment and Treatment Algorithm (PC-DATA) Project



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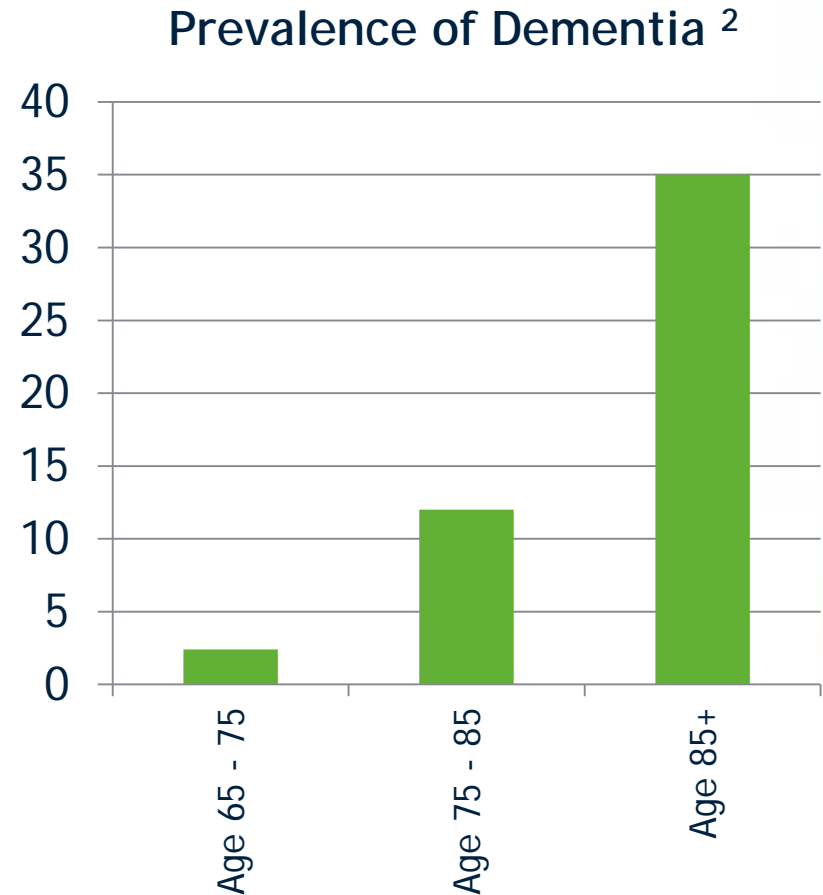
RGP Education Day

Toronto, Ontario

- No disclosures to declare

- 1. Review the Canadian Consensus Conference Guidelines on the Diagnosis and Treatment of Dementia (CCCDTD)
- 2. Understand the process of dementia guideline adaptation and implementation for primary care settings in Canada

- Currently 500,000 older adults with dementia in Canada
 - » ↑ 1.1 million in next 30 years¹
- Financial impact of dementia on healthcare:
 - » \$15 billion currently - \$150 billion in next 30 years¹



1. Alzheimer Society, 2010

2. CSHA, 1994

- “Typical” primary care practice:
 - ~ 1500 patients
 - » ~30 individuals with dementia
 - » 3 new cases per year
 - » 64% of individuals with dementia are not detected¹
- Dementia has major impact on management of other chronic diseases

Study	Diagnostic and Evaluation Skills	Lack of Time	Knowledge of Local Supports and Services	Confidence in Diagnosis	Access to Specialists	Information Technology
Fortinsky, 2010						X
Pimlott, 2009				X		
Pimlott, 2009	X	X		X	X	
Harris, 2009		X				
Yaffe, 2008			X		X	
Hansen, 2008	X		X			
Hogan, 2007						
Hinton, 2007		X	X		X	
Iilffe, 2006			X	X	X	
Cahill, 2006	X			X		
Iilffe , 2005	X		X	X		
Allen, 2005	X		X	X		
Turner, 2004	X		X		X	
Cody, 2002			X	X		
Olafsdottir, 2001			X			
Van Hout, 2000	X	X		X		
Downs, 2000	X			X		
Boise, 1999		X				

Seeking Understanding



Identifying the Problem



Role Transitions



Living with Change

Canadian Consensus Conference Guidelines on Diagnosis and Treatment of Dementia

- Created in 1999, updated in 2001 and 2007, 2012
- Cover range of dementia management from risk factors to severe dementia
- Guideline papers published in *Alzheimer's & Dementia*, 2007:
 - » 146 guideline recommendations,
 - » 178 pages
 - » 6 summary documents published in CMAJ in 2008
- Updated in Can Geriatr J, 2012



The collage features three main documents:

- Alzheimer's & Dementia**: The journal cover for the 2007 publication of the guidelines.
- CMAJ REVIEW**: A review article titled "Diagnosis and treatment of dementia: 4. Approach to management of mild to moderate dementia" by David G. Morgan, MD, et al., published in 2008.
- CLINICAL PRACTICE GUIDELINES/CONSENSUS STATEMENTS**: The cover of the 4th Canadian Consensus Conference on the Diagnosis and Treatment of Dementia (CCD1B4) summary document.

- Most patients with dementia can be assessed and managed adequately by their primary care physicians (CCCDTD, Grade B, Level III)
- All clinicians caring for patients with mild to moderate dementia have to acquire the core knowledge and skills required to manage this condition (CCCDTD, Grade B, Level III)
- A multifaceted education program should be implemented to promote the adoption of the 3rd CCCDTD recommendations by practitioners (CCCDTD, Grade B, Level I)
- Dementia education and dementia care managers are key mechanisms to improve the quality of dementia care in primary care^{1,2}

1. Vickrey, Ann Intern Med, 2006

2. Callahan, JAMA, 2006

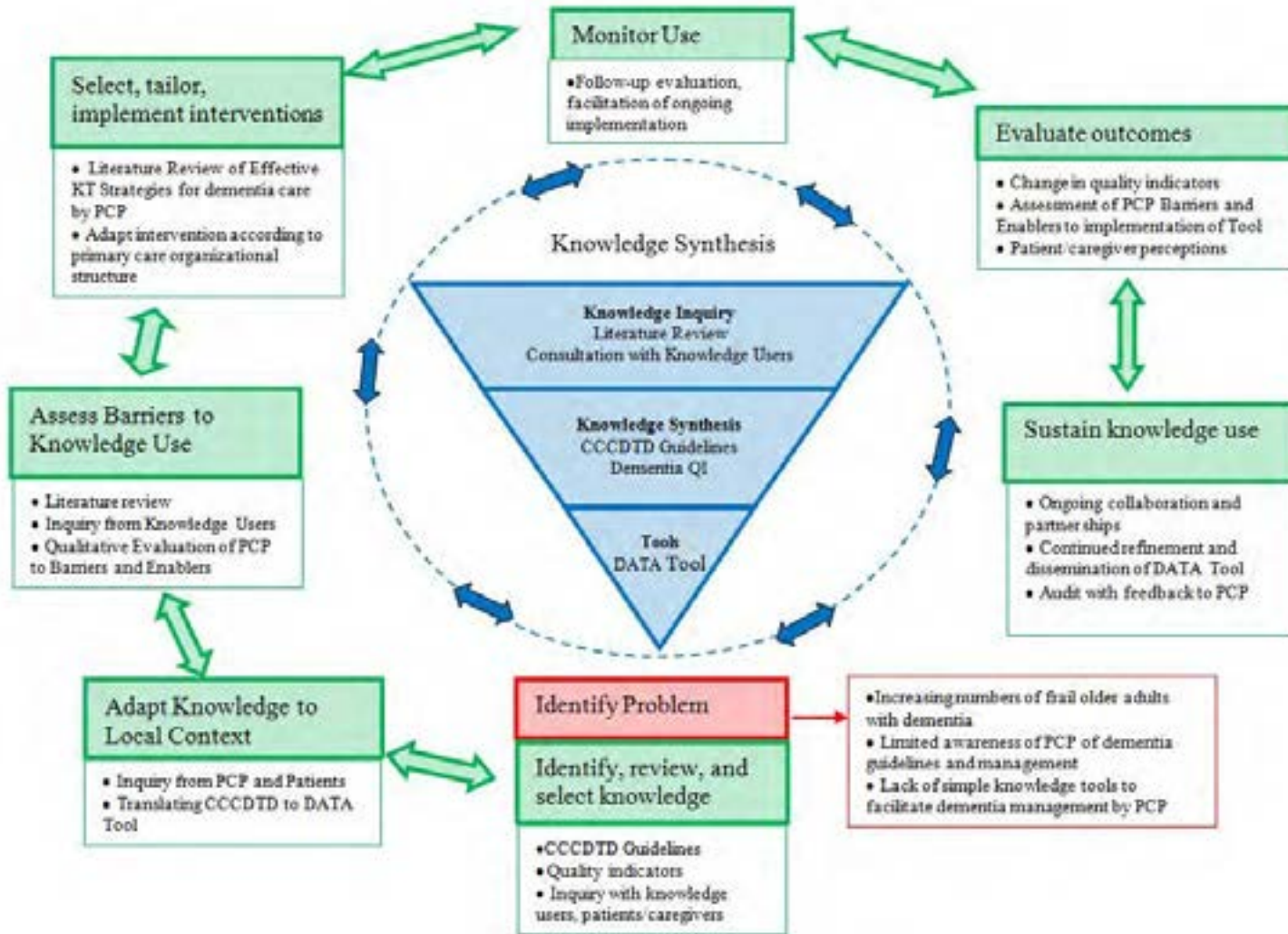


PCDATA

Primary Care | Dementia Assessment
& Treatment Algorithm

The Primary Care- Dementia Assessment and Treatment Algorithm (PC-DATA)

- Develop knowledge tools to facilitate assessment and treatment of Alzheimer's disease by Primary Care Providers (PCP) based on best evidence
 - » Canadian Consensus Conference on Diagnosis and Treatment of Dementia
- Transfer these knowledge tools into a variety of primary care settings in south eastern Ontario
 - » Education sessions and dementia care manager
- Evaluate the effects of this intervention on dementia quality of care, primary care provider (PCP) application of knowledge, and the patient-centeredness of care



- PCPs (family physicians, nurses, SW) from primary care groups in south eastern Ontario
 - » Family health teams, family health organizations, community health centres

- Initial information session and needs assessment meeting with each PCP group
 - » Assess needs and tailor intervention to local practice
- Educational sessions
 - » 1.5 hour group-based Dementia Assessment and Treatment Algorithm (DATA) tool implementation workshop with PCPs
 - » 1 hour follow-up session at study mid-point
- Dementia Care Manager (DCM)
 - » Facilitate application of the DATA tool and provide support to PCPs

- DCM is RN affiliated with Providence Care Geriatric Psychiatry Outreach Program

Possible DCM Functions:

- Patient screens positive or has cognitive complaints identified by PCP
- Referred to DCM
- DCM arranges visits with patient/caregiver, on-site or at home
 - » May also include Alzheimer Society, home care services
- May assist with evaluation, caregiver support, coordination of services
- DCM reviews with geriatric psychiatrist as needed
- Geriatric psychiatrist visits for complex patients

Primary Outcome:

- Change in number of dementia process of care quality indicators (QIs) achieved before (3 years) and after the intervention (1 year) using explicit chart audit review criteria

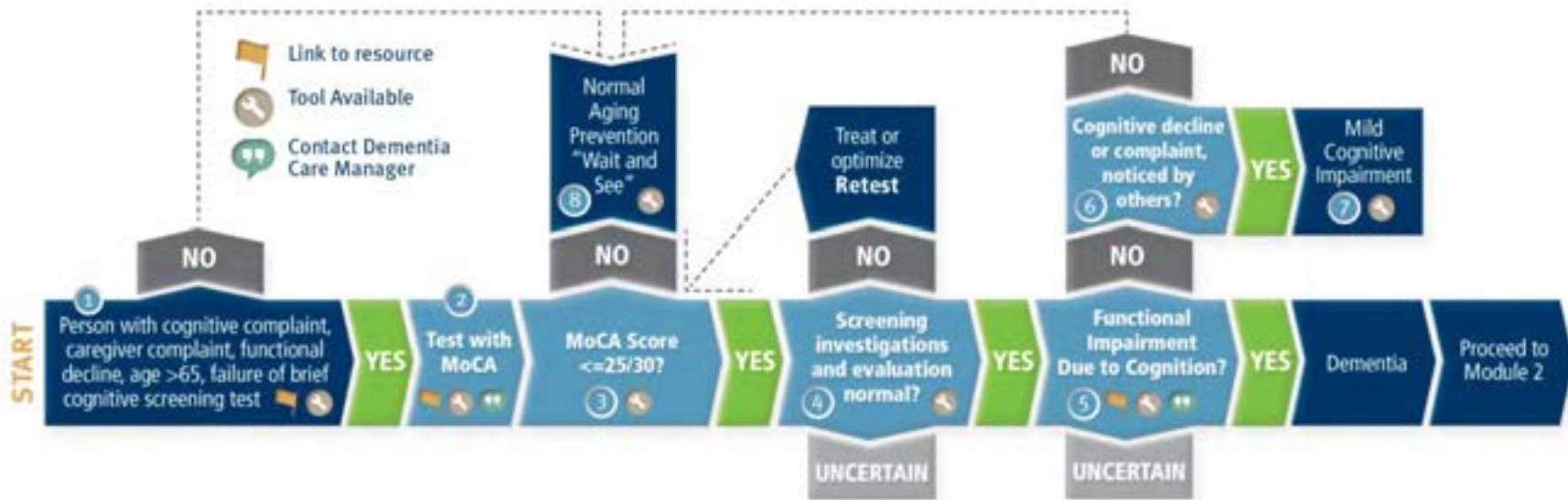
Secondary Outcomes:

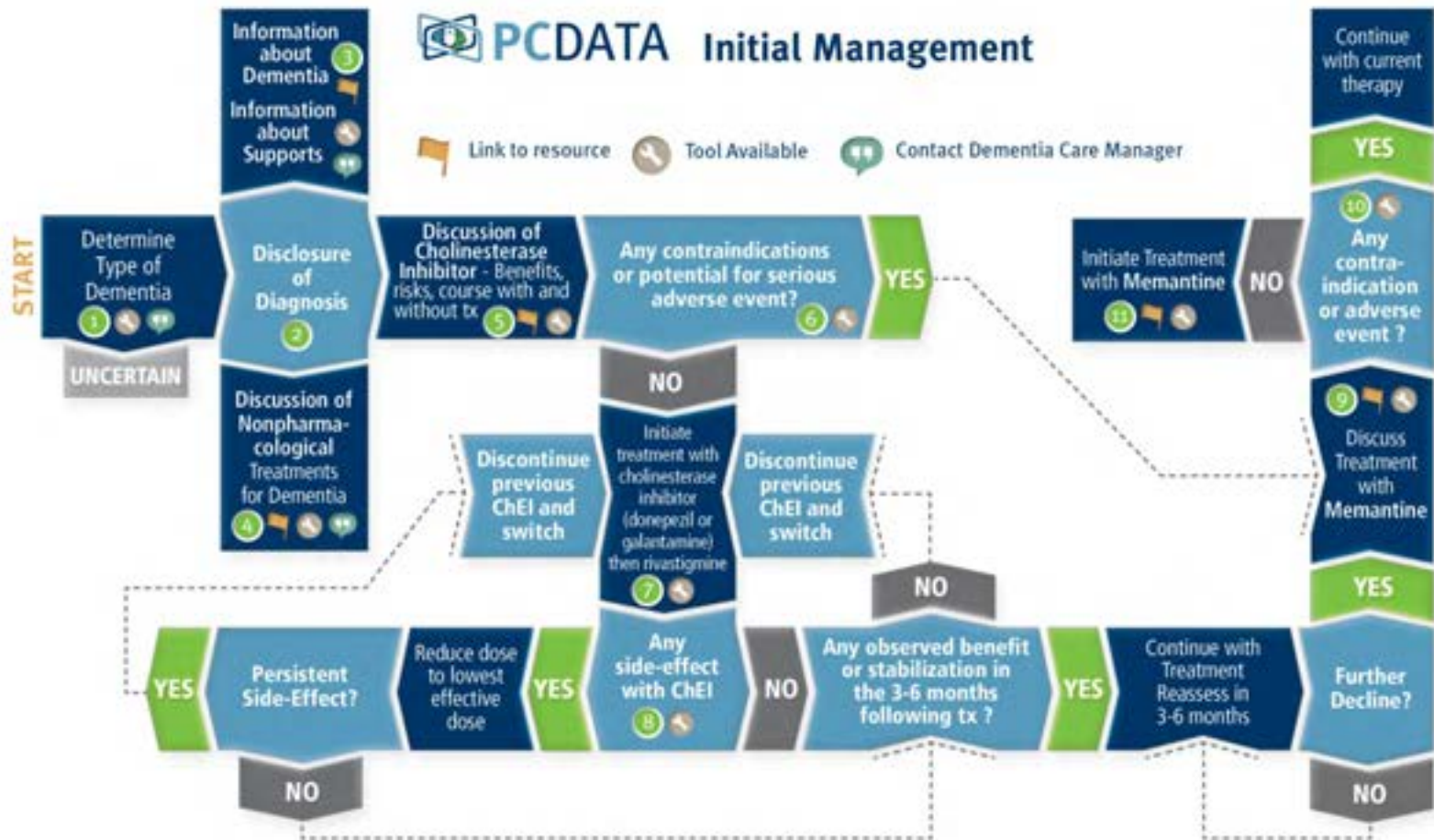
- Process evaluation of DCM role
- Patient and caregiver experience with program through interviews
- PCP interviews to identify facilitators and barriers to use of DCM

- Literature review to identify key components of dementia management for primary care physicians
- Literature review of patient and caregiver healthcare experience to identify current gaps in care
- Focus groups (5) with patients and caregivers to understand local context
- Pilot testing of tools with PCPs

- Three algorithms developed to assist PCP in evaluation and management of dementia
 - » Evaluation
 - » Initial Management of Dementia
 - » Ongoing Assessment and Monitoring
- Developed brief visit flow cheat sheets to assist patient assessment
- Hardcopy manual, electronic copies and website developed for tools
- Incorporated some existing tools into assessment (i.e. Montreal Cognitive Assessment, Health Aging Brain Centre Monitor)

 **PCDATA Evaluation - Assessment of Cognition & Diagnosis**





 PCDATA Ongoing Assessment and Monitoring

-  Link to resource
-  Tool Available
-  Contact Dementia Care Manager



Date (dd/mm/yy): _____

Physician Name: _____

PC-DATA Initial Visit Flow Sheet:

1. Demographic Data:


Name: _____ Gender: _____ DOB (dd/mm/yy): _____ Age: _____

Town: _____ Living Environment (home/apartment/retirement home/LTC): _____

Living Situation (Alone/With Spouse/Others): _____

Main Caregiver (Relationship): _____ Name (POA Finances): _____ POA (Personal Care): _____

Educational Achievement: _____



PCDATA

Primary Care | Dementia Assessment
Care & Treatment Algorithms

2. Presenting Complaint:

Source of information regarding change:

Presenting Symptoms:

Memory Impairment Personality

High risk population Psychosis

Abnormal cognitive screening test (MSE)

3. History of Cognitive Changes:

Duration of Complaint (years): _____

Progression (slow, progressive; rapid): _____

Cognitive Symptoms:

Memory: Forgetting Conversations (Y/N): _____ Forgetting Medical Appointments (Y/N): _____ Forgetting Medications (Y/N): _____ Repetitive (Y/N): _____

Agnosia: Failing to Recognize Familiar People (Y/N): _____ Difficulty Recognizing Familiar Locations (Y/N): _____

Language: Word finding difficulties (Y/N): _____ Word Substitutions (Y/N): _____ Difficulty Understanding Meaning of Words (Y/N): _____

Apraxia: Difficulties Using Appliances (Y/N): _____ Difficulty with Dressing (Y/N): _____ Difficulties with Walking (Y/N): _____

Executive Functioning: Difficulty Planning (Y/N): _____ Difficulty Organizing Activities (Y/N): _____ Difficulty Sequencing Actions (Y/N): _____ Loss of Abstract Thinking (Y/N): _____ Difficulty following instructions (Y/N): _____

Visuospatial: Getting Lost While Driving (Y/N): _____ Difficulty Navigating in Unfamiliar Environments (Y/N): _____ Wandering Out of Home (Y/N): _____

4. Cognitive Testing:

Montreal Cognitive Assessment Score (1-30): _____

Clock Drawing Test (normal/abnormal): _____

IQCODE (average score): _____ ADS (Number scored "Yes"): _____

Other Cognitive Testing: _____

Date and score of any previous testing: _____

5. Medical History:

Hypertension (Y/N): _____

Hypercholesterolemia (Y/N): _____

Coronary Artery Disease (Y/N): _____

Angina (Y/N): _____

Myocardial infarction (Y/N): _____

Atrial fibrillation (Y/N): _____

Diabetes Mellitus (Y/N): _____

Sleep Apnea (Y/N): _____

Falls (Y/N): _____

Stroke (Y/N): _____

TIA's (Y/N): _____

Parkinson's Disease (Y/N): _____

Other Neurological Diseases (Y/N): _____

Head Injuries (Y/N): _____

Seizures (Y/N): _____

Smoking (Y/N): _____

3. History of Cognitive Changes:

Duration of Complaint (years): _____ Onset (Sudden/Gradual): _____

Progression (slow, progressive; rapid): _____

Fluctuations (significant differences in cognitive functioning from one day to the next): _____

Cognitive Symptoms:

Memory: Forgetting Conversations (Y/N): _____ Misplacing Objects (Y/N): _____ Difficult Recalling Recent Events (Y/N): _____ Forgetting Appointments (Y/N): _____ Forgetting Medications (Y/N): _____ Repetitive (Y/N): _____

Agnosia: Failing to Recognize Familiar People (Y/N): _____ Difficulty Recognizing Familiar Locations (Y/N): _____

Language: Word finding difficulties (Y/N): _____ Word Substitutions (Y/N): _____ Difficulty Understanding Meaning of Words (Y/N): _____

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Visuospatial: Getting Lost While Driving (Y/N): _____ Difficulty Navigating in Unfamiliar Environments (Y/N): _____ Wandering Out of Home (Y/N): _____

 **Dementia
Information**

- + Public and Patients
- + About Dementia & Alheimers
- + Resources

 **Find Local Support Services** SearchLocal
service
directory **Health Care
Professionals**

The The Primary Care Dementia Assessment and Treatment Algorithm Project aims to improve the quality of care provided to older adults with Alzheimer's disease and related dementias by providing education and resources in primary care.

Healthcare professionals in Southern Ontario are invited to participate in the PCDATA project.

 Request AccessLogin
For
DATA
Tools **Ask PCDATA**

"Are there any small group homes (8-20 people) in your region specifically for seniors with Alzheimer's Disease/dementia? Could you please provide me the contact information of those with a good reputation?"

- + View Answer
- + View all FAQs
- + Submit an Question

 **Peer Support Forum**

Ask Questions or offer support to others affected by Alzheimer's disease and dementia.

- + Visit the Community
- + Join the Community

 **Quick Links**

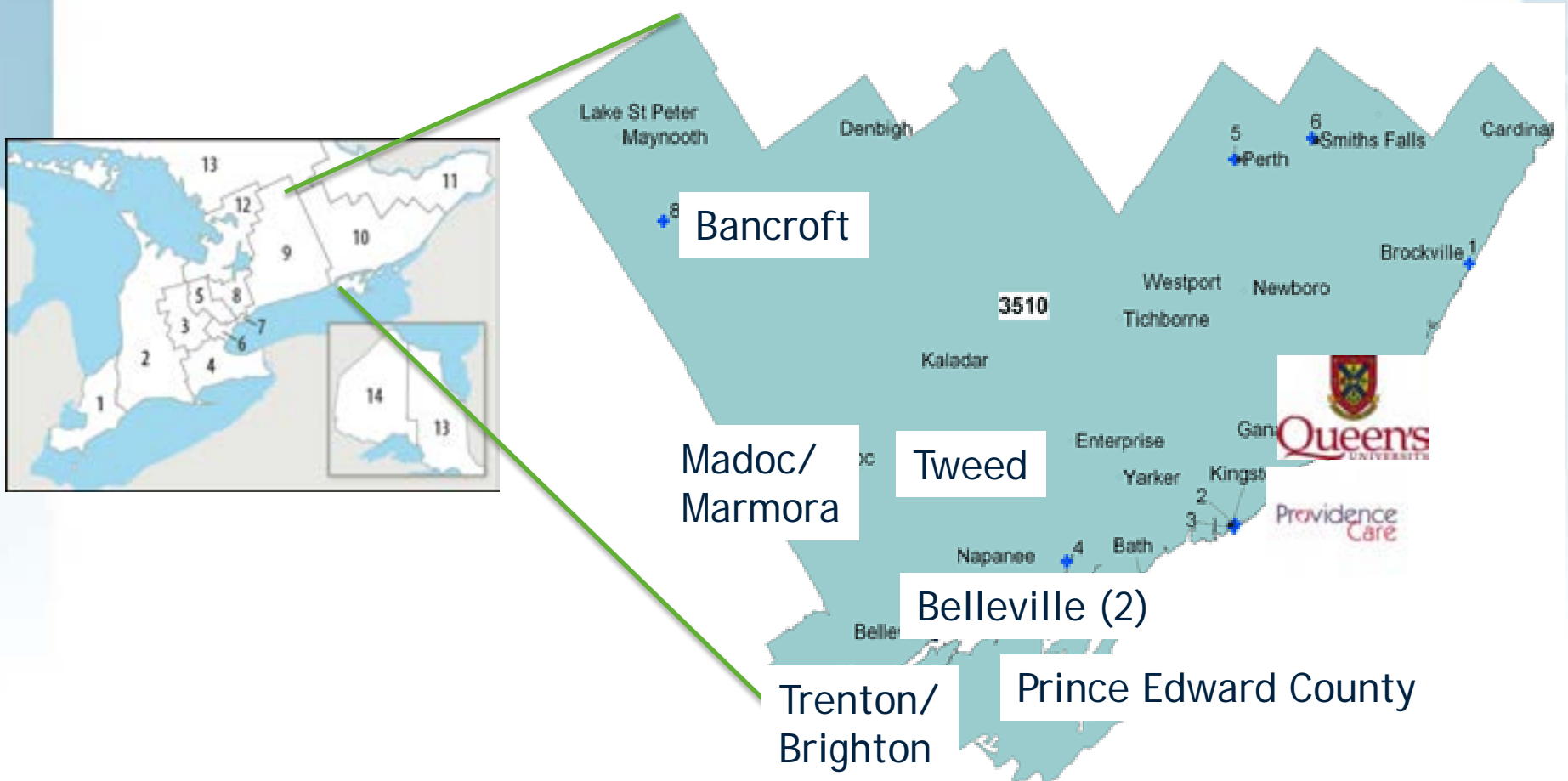
- + Future Planning
- + Medical Plans
- + Services for Persons with Dementia
- + Services for Caregivers

Share      



Side Effect	Donepezil	Galantamine	Rivastigmine	Management
Nausea Vomiting	9% 5%	15% 10%	33% 23%	<ul style="list-style-type: none"> Take medications with meals Use ChEI with less GI side effects
Diarrhea	10%	--	16%	*Similar to nausea
Anorexia Weight Loss	5% 4%	8% 5%	14%	*Similar to nausea
Sleep disturbances	5%	--	--	<ul style="list-style-type: none"> Take medications in morning Avoid sedative hypnotic medications if possible
Muscle cramps/pain	10%			Acetaminophen or NSAID
Dizziness Syncope/ bradycardia	3% Uncommon	6% --	10% --	<ul style="list-style-type: none"> If bradycardic consider reducing other medications which may cause bradycardia (β-blockers, CCB) If syncope without other identifiable cause discontinue ChEI
Urinary frequency/ incontinence	--	--	--	<ul style="list-style-type: none"> Scheduled toileting Consider discontinuing or reducing dose of medications that may contribute to frequency (diuretics) Avoid use of bladder anticholinergics

Recruitment: September, 2012 – January, 2013



Name	Structure	Physicians	Nurses	Other	Total
Brighton Quinte West	FHT	5	7	1	13
Loyalist	FHO	3	0	0	3
Queen's Belleville	FHO	4	1	0	5
Prince Edward	FHT	5	2	0	7
Centre Hastings	FHT	5	5	0	10
North Hastings	FHT	2	4	0	6
Gateway	CHC	3	6	2	11
Total		27	35	3	65

	Family Physician	Nurse	Other
Number of Participants	21	23	12
Rate the quality of activity on a scale of 1 (strongly disagree) to 5 (strongly agree):			
Met the stated learning objectives	4.76	4.56	4.29
Enhanced my knowledge	4.62	4.74	4.52
Satisfied my expectation	4.70	4.48	4.38
Conveyed information that applied to my practice	4.91	4.62	4.13
Free of commercial bias	4.96	4.93	4.67
Rate the quality of the presentation on a scale of 1 (poor) to 5 (excellent):			
Overall effectiveness	4.72	4.79	4.75
Content relevance	4.94	4.88	4.44
Use of effective teaching methods	4.70	4.74	4.52

Site	# New assessments	DCM Services Provided	Psychiatrist Services
Brighton Quinte West	6	CV = 5 HV = 6 TC = 13 R = 10 CCD = 3	CV = 5 HV = 2 CCD = 3 TC = 4
Loyalist FHO	8	CV = 6 HV = 1 TC = 4 R = 7	CV = 3 HV = 1
Queen's Belleville FHO	1	CV = 1 TC = 1	CV = 1
Prince Edward FHT	2	TC = 2	TC = 1
Centre Hastings FHT	3	HV = 2 TC = 5 R = 1	HV = 1 CCD = 1 TC = 1
North Hastings FHT	1	TC = 2 R = 2	CCD = 1
Gateway CHC	1	TC = 1	
Total	22	70	22

CV = clinic visit
 HM = home visit
 TC = telephone
 R = referral
 CCD = clinical case discussion

Characteristic	Total N = 17
Age	
Mean (SD)	82.2 (9.5)
Range	59 - 97
Female gender, N (%)	9 (52)
Living Environment, N (%)	
Home	11 (64.7)
Retirement home	6 (35.3)
Living Situation	
Spouse	5 (29.4)
Alone	4 (23.5)
Other	8 (47.1)
Reason for DCM Assessment	
Diagnostic evaluation	10 (58.8)
Management	7 (41.1)
Cognitive Testing	
MMSE, Mean (SD)	17.36 (7.78)
MoCA, Mean (SD)	15.8 (3.83)

- Finding time is key, promotes better discussion of model and problem solving
- Building trust and relationships is a process
- Opportunity for complex case reviews is important
 - » Capacity for LTC and transitions to LTC, involving CCAC in discussions
- Making opportunities for further capacity enhancement
 - » Inviting primary care team members to observe home visits and in-clinic assessments
- Model may not work for every setting
 - » Impact probably greatest for more complex patients
 - » “Sharing care” vs. “Transfer of care” (compared to other chronic disease programs)

- Continued quality improvement of model
 - » Improving processes for communication, clarifying roles of DCM and ways to involve DCM in care
- Evaluation of the effects of the intervention on the quality of care
- Qualitative data on patient, PCP, and dementia care manager experience

- Integrating geriatric psychiatry and primary care services will have increasing importance with the aging of our populations
- Implementation of dementia guidelines in primary care must take into consideration the context and culture of primary care in order to be effective
- Preliminary information suggests that dementia education and integrated models of care may be an effective way to improve dementia care in primary care

Member	Role
Dr. Ken Le Clair	Principal Knowledge User
Dr. Chris Frank, Canadian Geriatrics Society	Knowledge User
Mr. David Harvey, Alzheimer Soc	Knowledge User
Dr. Glenn Brown, Family Medicine	Co-Applicant
Dr. David Conn, CCSMH	Co-Applicant
Dr. Salinda Horgan	Co-Applicant
Dr. Ron Keren, CCD	Co-Applicant
Dr. Christopher Patterson, CCCDTD	Co-Applicant
Dr. David Barber, Family Medicine	Collaborator
Dr. Andrea Moser, Family Medicine	Collaborator

- Research Assistant:
 - » Jeanette Prorok MSc
 - » Lindsay Lavictoire MSc
- Dementia Care Managers:
 - » Debbie Penney RN
 - » Andrea Rhyno RN
 - » Diane Muldoon RN
 - » Erin Baldwin RN
 - » Bonnie Booth-Pyne RN
- Behavioral Supports Ontario
 - » Gina Johar

- CIHR Knowledge to Action Operating Grant KAL #114493
- Queen's University, Clinician Scientist Development Program Award
- Providence Care
 - » Allen Prowse
 - » Rob McDonnell, Shawn Souder
- South East LHIN Behavioral Supports Services



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