Impact of Rural Primary Health Care Memory Clinics: Perceptions of Team Members

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Background

- Rural older adults living with dementia may face low access to specialized services and resources, and consequently may experience diagnosis delays that further hamper service access.[1,2]
- Models of multidisciplinary collaborative dementia care based in primary care settings are associated with improved quality of life, reduced behavioural symptoms, and reduced use of acute services.[3] Such models are characterized by communication and shared decision-making between health professionals, training and support for primary care professionals by dementia specialists, and collaborative relationships between primary care and the patient-caregiver dyad.
- To address the need for effective care for rural persons living with dementia, the Rural Dementia Action Research (RaDAR) Team developed and implemented rural memory clinics in collaboration with primary health care (PHC) teams in Saskatchewan.[4] The evidence-based rural PHC memory clinic model incorporates interprofessional team-based care, decision support tools, and specialist-to-provider support.[5]

Research Objectives

- To examine patient assessments conducted over a 4-year period in the first three RaDAR rural PHC memory clinics established in Saskatchewan.
- To explore team member perceptions of the impact of RaDAR rural PHC memory clinics on dementia awareness, dementia assessment and specialist referral, and benefits.

	Team 1	Team 2	Team 3
Memory clinic implementation	Dec 2017	Sept 2018	Nov 2018
Population	• 1 community • 1,076 plus surrounding areas	• 1 community • 10,883 plus surrounding areas	• 3 communities • 1,722 plus surrounding areas
Team	• nurse practitioner (lead) • family physicians • home care • occupational therapy • physical therapy • Alzheimer Society First Link Coordinator	• family physician (lead) • social work • occupational therapy • physical therapy • Alzheimer Society First Link Coordinator	• nurse practitioner (lead) • family physicians • home care • occupational therapy • physical therapy • Alzheimer Society First Link Coordinator

Table 1: RaDAR Rural PHC Memory Clinics established in Saskatchewan, 2017-2018

Methods

Secondary analysis of rural PHC memory clinic assessment data

- Patients were assessed by one of three RaDAR rural PHC memory clinic teams in Saskatchewan between December 1, 2017 and November 30, 2021 (Table 1).
- Patient assessments were guided by an adapted version of the Primary Care Dementia Assessment and Treatment Algorithm (PC-DATA™) and entered into a PC-DATA flowsheet embedded in teams' Med Access electronic medical record (EMR) system. This information was extracted from the EMR by Saskatchewan Health Authority staff and transferred to researchers for analysis.
- Quantitative data were summarized descriptively and thematic analysis was undertaken with qualitative data.

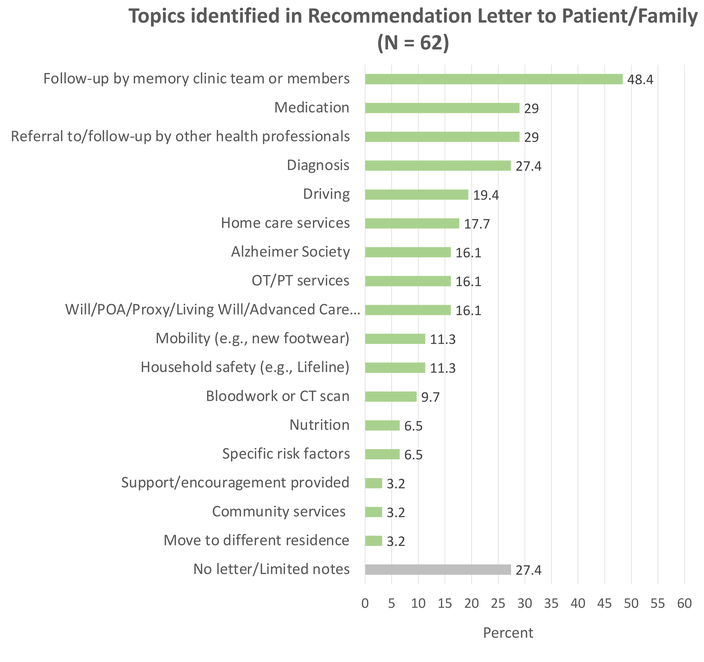
Focus Groups with rural PHC memory clinic team members

- In January 2022, two separate focus groups were conducted by telephone with 12 members of three rural PHC memory clinic teams (some of whom served multiple teams): Team 1 (n = 4), Team 2 (n = 3), Team 2 & 3 (n = 4), Team 1, 2, & 3 (n = 1).
- Focus group questions explored perceptions of dementia care after the implementation of rural PHC memory clinics, compared to usual care.
- Audio recordings were transcribed and thematic analysis conducted.

Results

Rural PHC Memory Clinic Assessment Data (Secondary Analysis)

Patient Characteristics (N = 62)	n (%) M (SD, range)
Female (n = 62)	36 (58.1)
Age (n = 62)	79.0 (9.6, 44-99)
Education (n = 50)	
Less than high school	28 (56.0)
High school	14 (28.0)
Postsecondary	5 (16.0)
Lives alone (n = 59)	25 (42.4)
Main caregiver (n = 52)	
Spouse	28 (53.8)
Child/Grandchild	9 (17.3)
Other family/friends	7 (13.5)
No caregiver	8 (15.4)
Duration of complaint (n = 45)	
Less than 1 year	4 (8.9)
1-2 years	18 (40.0)
3-5 years	12 (26.7)
6 or more years	11 (24.4)
MMSE score (n = 55)	23.8 (5.0, 8-30)
MoCA score (n = 46)	18.3 (6.1, 7-30)
AD8 score (n = 35)	4.0 (2.2, 0-8)
FAQ score (n = 50)	12.5 (8.5, 0-30)
KATZ score (n = 40)	5.4 (1.2, 1-6)
Impression (n = 33)	
Mild cognitive impairment	14 (42.4)
Dementia	12 (36.4)
Normal aging	3 (9.1)
Subjective cognitive impairment	2 (6.1)
Uncertain	2 (6.1)
Memory Clinic Team	
Team 1	22 (35.5)
Team 2	22 (35.5)
Team 3	12 (19.4)



- 62 patients were assessed by 3 rural PHC memory clinic teams over a 4-year period. The low number of patients is partly attributable to reduced clinic frequency and staff shortages during the COVID-19 pandemic.
- The most common topics included in recommendation letters to patients/families after assessment were *follow-up by memory clinic team or members* (48.4%), *medication* (29%), *referral to or follow-up by other health professionals* (29%), *diagnosis* (27.4%), *and driving (*19.4%). No letter/limited notes were available for 27.4% of patients.
- Compared to usual care, rural PHC memory clinic team members reported awareness of the memory clinics has resulted in patients/families being more proactive in seeking care. The dementia assessment process in rural memory clinics was described as more comprehensive, coordinated, and collaborative. Multiple benefits were observed for patients/families and team members.

Team Member Perceptions of Rural PHC Memory Clinic Impact (Focus Groups)

Dementia awareness

- **More referrals for dementia assessment**: referrals from health professionals within and outside community; health care providers are "more in tune to patients"
- **Less stigma**
  - **Families** are aware of the memory clinics, more proactive in contacting health professionals for assessment, and seek information about supports (e.g., First Link referral)
  - **Patients** are bringing forth issues on their own, teams can offer to see patients in the memory clinic

Representative Quote

"I think that because we have that awareness as providers, I think that has piqued our interest. So we are more in tune to our patients. And I think even our MOAs are more in tune to that as well." (T1P3)

"I think for myself, I just recently had a person in community contact me. They were aware of the RaDAR clinic that's offered in community, and they actually contacted me wondering how they go about tapping into that." (T2P4)

Dementia assessment process

- **More comprehensive and coordinated assessment**: assessment is standardized to determine dementia progression vs usual care where each health professional would assess a specific issue; assessment process is less fragmented and more efficient now; dementia assessment is more multidisciplinary and comprehensive even for patients not going through the memory clinic
- **Improved collaboration**: team-based approach allows for multiple perspectives vs single perspective (e.g., on family issues); different disciplines pool their knowledge and observations to develop a care plan; health professionals within the team connect more directly with each other vs "in passing"
- **Increased confidence of health professionals and less frequent specialist referrals**: health professionals are more confident in their knowledge and in holding family conferences; can offer more support (e.g., home care, Alzheimer's Society); more likely to discuss planning for the future (e.g., advanced care directive, driving)
- **Increased family involvement**: families are more involved and want to be involved (e.g., "open to suggestions"); family meetings during memory clinic help everyone get on the same page; families have a better understanding (e.g., of diagnosis, disease progression, how they can help)

Representative Quote

"So when this whole thing came to be it gave us the confidence to say, "Oh, so we're enough." We always felt we weren't knowledgeable enough or we didn't know enough, and so we better get an MRI or we better send them to a neuro-somebody or whatever. But what the algorithm and what this whole process has given us is the confidence to say - and to recognize when we aren't, I guess, but it's not in that many cases." (T1P2)

"…now that we've seen what the different team members do and how they contribute to the assessment process and clinic, even if our client isn't going through the specific memory clinic, that we're kind of - we still go through those same motions." (T2P5)

Benefits

- **Patients and families**: more support, feel less overwhelmed and alone knowing they can contact team if they notice changes; more preparation such as planning for long-term care admission
- **Health professionals**: build relationships with families to provide support on the dementia journey and prevent crises such as hospitalization; hopeful they will see fewer crises if families know they can call the team; multidisciplinary approach improves understanding of the knowledge/resources of other health professionals and facilitates connecting patients/families to different team members as needed

Representative Quote

"…there's more comfort for them. Because they now have their people, so to say, that they know that they can contact, right? So, the process is started, so we now have a baseline of kind of where they're at. 'If things change, can I call you?' Well, absolutely give us a call." (T2P4)

"And I think that that's really important, because depending on what's going with the patient, with the family, they're going to be connecting with different team members at different times. And so, for each of the team members to be aware of who comprises of the team, the knowledge and the resources that each team members offers, it's really quite invaluable for us to be able to know…" (T2P5)

Conclusion

- RaDAR rural PHC memory clinics, developed and implemented in collaboration with PHC teams, have had a *positive impact on dementia awareness and assessment in rural communities*. The memory clinics *benefit* patients, families, and health professionals.
- Interprofessional rural memory clinics embedded in primary health care offer coordinated, collaborative, and comprehensive care situated within patients' local areas, connect patients and families to local supports, and potentially reduce specialist referrals and travel to urban centres for specialist care.

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