Is Dementia Related to a Longer Wait Time to be Assigned a New Primary Care Provider? An Analysis of the Nova Scotia Need a Family Practice Registry Derived from the PUPPY-Study

Miranda L. McConnell[1], MD candidate, Emily Gard Marshall[1], PhD, David Stock[1], PhD,
Shanna C. Trenaman[2], PhD, Melissa K. Andrew[3], MD, PhD

[1]Primary Care Research Unit, Dalhousie Departments of Family Medicine, Dalhousie University, Halifax, [2]Department of Medicine (College of Pharmacy), Dalhousie University, Halifax, [3]Department of Medicine (Geriatrics), Dalhousie University, Halifax, NS

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ABSTRACT

Background

Access to Primary Care Providers (PCPs) is limited for many Canadians. “Unattached patients” are persons who do not have a PCP. Older adults living with dementia may face greater challenges seeking attachment. This study investigated whether older adults living with dementia experience differential wait times for PCPs compared to those without a diagnosis of dementia.

Methods

This was an observational descriptive study of the centralized wait-list data from the Nova Scotia (NS) Need a Family Practice Registry (NaFPR). Time on provider wait-list by dementia diagnosis and age were compared. Number of days on the registry across these measures was estimated. Multivariable proportional hazards regression was used to compare hazards of remaining on the registry over time.

Results

Unattached older adults living with dementia were on the NaFPR for less time compared to those without dementia (381.4 vs. 428.8 days, respectively). After adjusting for age, self-reported gender, comorbidity, rurality, income quintiles, and overall deprivation, older adults with dementia had a 1.13-fold (95% CI: 1.04-1.24) increase in the likelihood of leaving the NaFPR. Potential contributors to this small difference could be placement in Long Term Care (LTC) and subsequent facility PCP attachment.

Conclusions

Analysis of the NaFPR exhibited similarly time to PCP attachment despite a diagnosis of dementia. This represented an effective equality model of health care utilized in NS. Future studies should investigate whether an equity model with priority attachment for vulnerable patients would reduce hospitalization and LTC institutionalization.

Key words: dementia, geriatrics, primary health care, waiting list, frail, elderly

INTRODUCTION

Canada is known for its publicly funded and universal healthcare system; however, not everyone has a regular Primary Care Provider (PCP), which potentially restricts access to health care. A PCP is the first point of contact to the healthcare system, ensures appropriate care for day-to-day medical illness, and manages chronic disease.(1) People with a regular PCP are ‘attached’ to that provider; those without PCPs are referred to as ‘unattached patients’. Canada has the lowest rate of attachment to PCPs among the Organisation for Economic Co-operation and Development (OECD) countries.(1) The shortage of PCPs in Nova Scotia (NS) has led to long waits to obtain a PCP(2) and may result in poorly managed health conditions.(3) Scarcity is especially true in rural NS areas where the geographic location and distance from city centres may limit access to a fixed number of PCPs.(4) To address this, the Need a Family Practice Registry (NaFPR) was created in 2016 to match patients and PCPs.

Other provinces that have implemented centralized wait lists (CWL) to address the lack of PCPs prioritize attachment for complex or vulnerable patients.(5) The NaFPR is the only CWL in Canada that matches unattached patients regardless of health status, employing a “first come, first serve” principle. This is consistent with an equality approach rather than an equity approach used in other provinces to improve access for patients with higher health-care needs. In the absence of equity-based prioritization, attachment to a PCP can happen in various, unpredictable ways. For example, fee for service providers determine how and when they accept new patients into their practice. Ability to refuse patients could cause complex care patients to be discriminated against because of financial or workload-related incentives.(6)

Attachment is critical for older people and those living with dementia since presence of chronic disease and cognitive decline often co-occur(7) and attachment optimizes access to effective chronic disease management.(8,9) Some studies have suggested that PCPs may favour enrollment of healthier patients with less complex needs, in which case, older people living with dementia and often multiple concomitant chronic health conditions, may be facing longer wait times to be assigned a PCP.(6) To our knowledge, this study is the first study to assess whether older adults living with dementia experience longer wait times for PCP attachment inferred by duration on the NaFPR.

METHODS

Design and Procedure

This study was an observational descriptive cohort study analyzing centralized primary care wait-list data from the NS NaFPR. This research is part of a larger study termed the PUPPY study, "Problems Coordinating and Accessing Primary Care for Attached and Unattached Patients Exacerbated During the COVID-19 Pandemic Year", which was built from the cross-provincial CIHR-funded CUP-Study (Comparative analysis of centralized waitlists [CWL] effectiveness, policies, and innovations for Connecting Unattached Patients to PCPs).

Our study focuses on the impact of a dementia diagnosis on the likelihood of leaving the NaFPR among registry users aged 50 and older. The study period was from January 1, 2018, to December 31, 2020. This three-year period comprised a two-year "enrollment" period (January 1, 2018, to December 31, 2019), allowing one to three years of follow-up as seen in Figure 1.

Data Sources

Nova Scotia NaFPR and administrative health data were linked by Health Data Nova Scotia (HDNS). Linkage included the Registered Persons Database identifying NS residents eligible for publicly insured health care, physician billing database, Canadian Institute for Health Information Discharge Abstract Database (i.e., inpatient hospital encounters), and postal code-linked 2016 Canadian census data. Canadian census data comprised household neighbourhood income quintiles aggregated at the level of the census dissemination area as a marker of socioeconomic status, and community population size to infer rurality.(10) Postal code-linked census data were additionally used to assign census-dissemination area-aggregate Canadian Index of Multiple Deprivation (CIMD) summary scores.(11)

Key Study Measures

The main outcome was leaving the NaFPR. While the majority of NaFPR users leave because of attachment to a new PCP, registration status can be terminated for other reasons. The outcome of leaving the registry was met when the subject was either attached to a new provider via the registry, they found a PCP by their own means, they moved to a Long-Term Care (LTC) home and were automatically attached to a provider there, or they cancelled their request for a PCP for any reason, including death. Subjects who did not leave the registry were censored at the end of the study period.

The main explanatory measure of interest was the presence of a dementia diagnosis. The dementia case definition

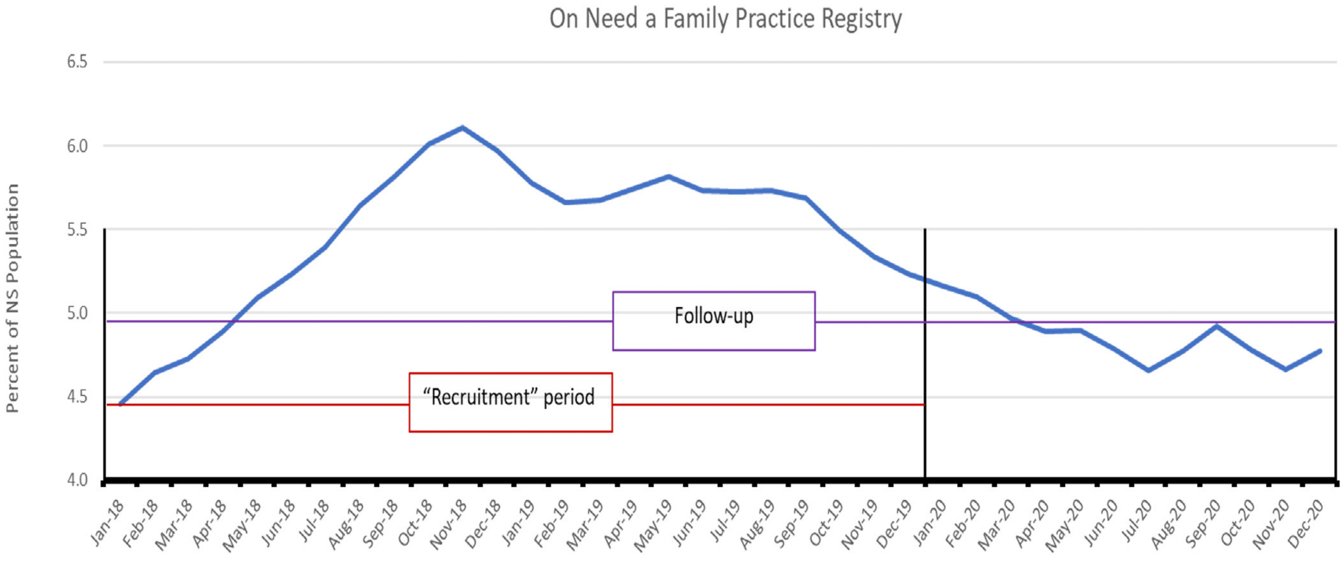

FIGURE 1. Project study period January 1st, 2018, to December 31st, 2019; follow-up period from January 1st, 2020, to December 2020

used in this study conforms to the Canadian Chronic Disease Surveillance System "Dementia, including Alzheimer's disease" administrative health data algorithm. This definition included unattached patients with a dementia code associated with "one or more hospitalizations; or three or more physician claims within two years, with at least 30 days between each claim; or one drug (Cholinesterase Inhibitor) prescription or more".(12) As dementia diagnoses are commonly under-assigned,(13,14,15) especially in people who lack PCP access, we also assessed a more sensitive definition which required a single physician claim, instead of three or more physician claims within two years.

Additional covariables considered when analyzing the association between dementia and likelihood of leaving the NaFPR were self-reported gender, Charlson Comorbidity Index, household income, rurality, and the Canadian Index of Multiple Deprivation (CIMD) summary index. These factors may be associated with differences in the likelihood of leaving the NaFPR, or the main exposure of dementia. The Charlson Comorbidity Index scores overall comorbidity based on risk of inpatient death predicted by prevalent comorbid conditions identified using the International Classification of Diseases (ICD) diagnosis codes found in hospital discharge abstracts.(16,17,18) Charlson Comorbidity Index was included since multimorbidity is common among those living with dementia.(19,20) Rurality affects the density of physician services available in the community, potentially limiting PCP attachment. The CIMD is a composite index of deprivation comprising social well-being, education, residential instability, economic dependency, ethno-cultural composition, and situational vulnerability.(21) Socio-economic status and social deprivation have been shown to be associated with dementia incidence and prevalence(7,22,23,24) and access to care.(4,25)

Analysis

Population proportions and measures of central tendency of time on registry (truncated on December 31, 2020) by dementia status, age, and study covariables of interest, are described. Kaplan-Meier curves, log-rank and Wilcoxon signed-rank tests were used to assess the likelihood of leaving the registry over time, stratified by dementia diagnosis. Multivariable proportional hazards regression was used to assess the independent association between dementia status and leaving the registry. Crude (unadjusted) dementia followed by age and gender adjusted models were initially analyzed. Two additional multivariable models were constructed using a systematic approach of adding covariable blocks corresponding to domains of 1) comorbidity burden, and 2) sociodemographic, geography, and deprivation. Product terms were modelled to assess effect modification of dementia status on leaving the NaFPR by age. Individuals were censored at date of death for all survival analyses. Statistical analyses were conducted using Statistical Analysis System (SAS).

Ethics approval was obtained through the Research Ethics Board (REB) at NSH (1024979).

RESULTS

Descriptive Analyses

There were 30,503 unattached patients 50 years or older registered on the NaFPR during the study period (Table 1). Of these, the mean age was 65.6 (±9.8) years old in those without dementia and 78.4 (±8.6) years old in those with dementia. Of the former, 54% (16,477) self-reported their gender as female, 45.8% (13,961) male, and 0.2% (32) of individuals identified as non-binary. Of the patients on the registry, 721 were identified as having dementia, of whom 56.4% (407) were female and 43.6% (314) male. Of the 721 patients living with dementia, 46.9% (338) were 80 years old or older. Unattached patients aged 50 years and older living with dementia were waiting an average of 381.4 (SD: 256.9) days on the NaFPR compared to 428.8 (SD: 260.5) days for those without dementia (Table 1)—a crude difference of 47.4 days. Regarding death on the NaFPR or within 30 days of coming off the registry, 2.6% (19 of 721) of those with a diagnosis of dementia had died compared to 0.7% (224 of 30,503) of those who did not have dementia.

Figures 2A and B convey the cumulative survival probability of remaining on the NaFPR over time stratified by dementia status (Figure 2A) and self-reported gender (Figure 2B). There was a small statistically significant (log-rank test; p <.001) increased chance of leaving the registry earlier in those with dementia than those without (Figure 2A). As illustrated in Figure 2B, there were no statistically significant differences in time on the NaFPR between genders in those with dementia.

Proportional hazards regression showed that registry users with dementia had an increased chance of leaving the registry during the study period in crude unadjusted analysis (HR 1.24, 95% CI: 1.14–1.35) (Table 2). This difference was diminished when accounting for additional variables, as seen in Table 2 (HR 1.13, 95% CI: 1.03–1.24).

Compared to registry users 50–69 years, older users were slightly more likely to leave the registry when adjusted for self-reported gender and dementia status (model 2: HRage 70–79 1.06, 95% CI: 1.02-1.10; HRage >80 1.09, 95% CI: 1.03–1.14). However, this effect was attenuated when Charlson Index, rurality, income quintiles, and CMID index summary score were added in subsequent models (models 3 and 4). Having a Charlson Index of >4 was associated with being 45% more likely to leave the registry (HR 1.45; 95% CI: 1.37–1.53). On the other hand, a CIMD index score of >4 was associated with a 36% reduction in likelihood of leaving the registry (HR 0.64; 95% CI:0.58–0.70). In the fully adjusted model (model 4), registry users living in rural areas were 21% less likely to leave the NaFPR than non-rural users (HR 0.79, 95% CI: 0.76–0.81). Compared to the lowest income quintile, a higher (Q3) income quintile was modestly associated with reduced time on the registry (Q4 HR 1.07; 95% CI: 1.01–1.12), though this did not hold for the highest income quintile (HR 1.03; 95% CI: 0.97–1.09). We did not find any indication of effect modification of having dementia and likelihood of leaving the NaFPR by age.

TABLE 1.
Description of the Nova Scotia (NS) Need a Family Practice Registry (NaFPR) users linked with Problems Coordinating and Accessing Primary Care for Attached and Unattached Patients in a Pandemic Year (PUPPY) Primary Care User NS population, by dementia status registered between the two-year period of January 1, 2018, to December 31, 2019

	NaFPR Registrants (registered Jan 1 2018 to Dec 31, 2019) linked with PUPPY “PHC Users”							
	Total NaFPR sample				*Dementia*			
	Distribution		*Time on Registry (days)*		*Distribution*		*Time on Registry (days)*	
	n	*mean (SD)/%*	*mean (SD)*	*median (P25, P75)*	*n*	*mean (SD)/%*	*mean (SD)*	*median (P25, P75)*
Overall								
	30,503	N/A	428.8 (260.5)	422.0 (197, 618)	721	N/A	381.4 (256.9)	349 (154, 566)
Age								
Age (mean; SD)	30,503	65.6 (9.8)	N/A	N/A	721	78.4 (8.6)	N/A	N/A
50-59 yrs	10,211	33.5	440.8 (260.2)	436 (210, 624)	24	3.3	413.4 (209.9)	410 (288.5, 559.5)
60-64 yrs	5,542	18.2	434.9 (259.1)	434 (205, 623)	36	5.0	376.6 (267.9)	404 (106, 627)
65-69 yrs	5,111	16.8	428.7 (260.9)	427 (197, 617)	59	8.2	425.0 (219.7)	446 (246, 561)
70-74 yrs	4,163	13.6	418.3 (261.3)	407 (186, 611)	108	15.0	358.9 (248.2)	292 (141, 540)
75-79 yrs	2,602	8.5	417.7 (264.1)	408 (181, 615)	156	21.6	397.2 (276.6)	386 (147, 594.5)
≥80 yrs	2,874	9.4	399.9 (255.8)	386.5 (171, 591)	338	46.9	371.9 (258.4)	308 (152, 555)
Missing Age	0	0	N/A	N/A	0	0	N/A	N/A
Gender								
Female	16,477	54.0	428.0 (260.8)	421 (198, 618)	407	56.4	380.5 (252.6)	363 (153, 566)
Male	13,961	45.8	430.1 (260.3)	426 (199, 618)	314	43.6	382.6 (262.8)	337 (155, 566)
Non-binary	32	0.1	426.7 (222.7)	406 (276.5, 562)	0	0	N/A	N/A
Unknown (missing)	33	0.1	289.2 (201.1)	224 (142, 390)	0	0	N/A	N/A
Charlson Comorbidity Index								
0	14,366	47.0	449.1 (258.4)	450 (220, 634)	71	9.8	484.1 (274.6)	525 (181, 714)
1	8,185	26.9	425.2 (264.4)	414 (189, 617)	239	33.1	408.8 (269.8)	391 (176, 576)
2	3,816	12.5	411.7 (261.6)	399 (185, 594)	157	21.8	364.5 (238.1)	335 (155, 534)
3	1,905	6.2	398.4 (256.5)	385 (175, 589)	87	12.1	320.4 (237.9)	245 (106, 492)
≥4	2,231	7.3	366.4 (245.6)	327 (158, 545)	167	23.2	346.2 (241.9)	290 (149, 539)
Rurality								
Non-rural	15,242	50.0	406.7 (250.0)	404 (194, 581)	329	45.6	370.5 (242.3)	358 (147, 541)
Rural	15,147	49.7	451.2 (268.8)	445 (200, 656)	389	54.0	391.9 (269.1)	346 (152, 582)
Missing	114	0.4	402.6 (263.7)	384 (156, 575)	s[a]	c[b]	N/A	N/A
Income Quintiles								
Q1 (lowest)	6,175	20.2	447.6 (265.4)	444 (206, 646)	158	21.9	357.3 (240.7)	324 (140, 526
Q2	6,625	21.7	442.5 (258.9)	436 (212, 627)	171	23.7	390.1 (256.4)	363 (175, 587)
Q3	5,974	19.6	430.4 (263.1)	428 (195, 619)	135	18.7	392.8 (287.0)	308 (128, 602)
Q4	6,389	21.0	417.6 (257.5)	413 (187, 606)	153	21.2	379.0 (249.6)	335 (161, 549)
Q5	5,226	17.1	401.6 (254.2)	399 (170, 583)	101	14.0	397.7 (254.9)	378 (175, 553)
missing	114	0.4	402.6 (263.7)	384 (156, 575)	s	c	N/A	N/A
Summary Canadian Index of Multiple Deprivation (CIMD)								
1 - 2	2,298	7.5	385.6 (243.5)	372 (179, 535)	38	5.3	352.9 (238.2)	319 (196, 541)
>2 - 3	11,481	37.6	417.5 (257.8)	412 (188, 603)	230	31.9	384.7 (246.7)	378.5 (159, 552)
>3 - 4	14,527	47.6	438.6 (263.9)	435 (202, 630)	397	55.1	377.3 (264.2)	321 (148, 570)
>4 - 5	2,073	6.8	471.6 (259.1)	478 (252, 657)	52	7.2	432.6 (263.1)	447.5 (182.5, 590.5)
missing	124	0.4	403.8 (264.7)	374.5 (171.5, 578.5)	s	c	N/A	N/A

[a]”s” indicates “small cell”; cell size <5 (data privacy restriction).
[b]”c” indicates “censored”; so that the small cell size in the adjacent cell cannot be directly computed.

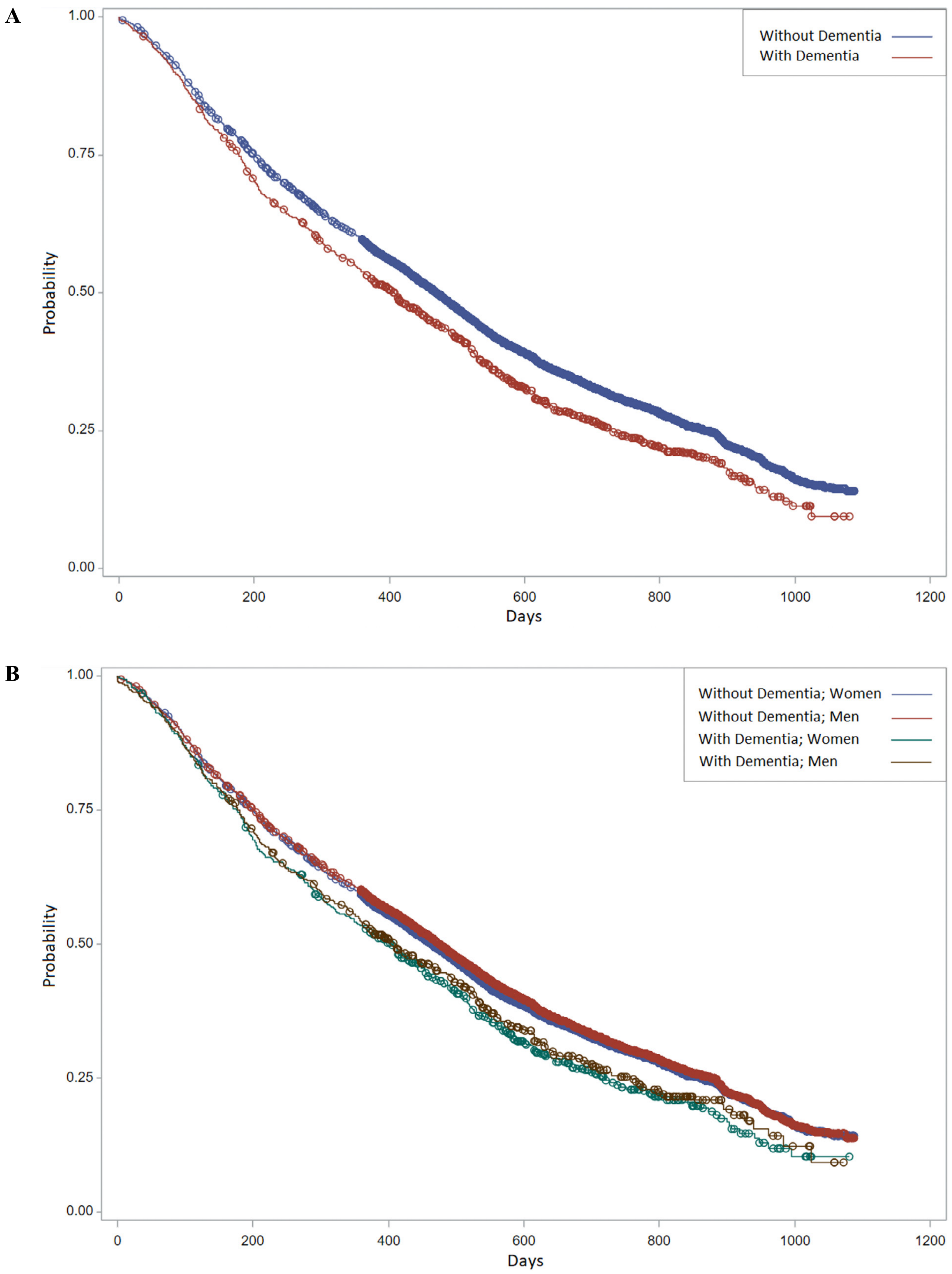

FIGURE 2. Kaplan-Meier Curves demonstrating the cumulative probability of unattached patients remaining on the Nova Scotia Need a Family Practice Registry (NaFPR) over time, measured by number of days: A. Cumulative survival on the NaFPR of those living with dementia and those without dementia from January 1, 2018, to December 31, 2019 (log rank and Wilcoxon ran tests: $p < .001$); B. Number of days on the NaFPR stratified by dementia and self-reported gender

DISCUSSION

Our study suggests that those with dementia spend modestly less time on the NaFPR awaiting attachment to a PCP. Among adults aged 50 and over, those living with dementia were 24% more likely to end their enrollment on the registry compared to people without dementia (HR 1.24, 95% CI: 1.14–1.35). However, the difference was attenuated to 13% (HR 1.13, 95% CI: 1.02–1.24) after adjusting for age, self-reported gender, Charlson Comorbidity Index, rurality, income quintiles (socioeconomic status), and CIMD summary score. It was important to include these covariables because those who had dementia and those without dementia could have differed in important and systematic ways. For example, registry users living with dementia comprised a significantly larger proportion of people aged 80 and older (46.9%) compared to those without dementia, of whom only 9.42% were aged 80 or older. While an overall cumulative hazard ratio of 1.13 represents a statistically significant increased likelihood of leaving the registry, it may not imply a meaningful difference, as this corresponds to a crude average shorter duration of 47.4 days. One month and a half less time on the registry for those with dementia may not represent a clinically meaningful difference since early intervention by a PCP with pharmacological and non-pharmacological methods has been shown to be one of the most effective ways to improve quality of life and trajectory of disease in dementia.[8,26,27]

TABLE 2.
Proportion Hazards Regression results; relative hazard risk ratio of leaving the
Nova Scotia Need a Family Practice Registry (NaFPR) in progressively nested models

n= 30,305	*Model 1*			*Model 2*		*Model 3*		*Model 4*	
	Dementia Only			*Dementia, age, gender*		*+ Charlson*		*+ Rurality, SES, CIMD*	
	n events	*HR*	*95% C.I.*	*HR*	*95% C.I.*	*HR*	*95% C.I.*	*HR*	*95% C.I.*
Dementia									
No Dementia (ref)	19,668								
Dementia	521	1.24	1.14-1.35	1.20	1.10-1.31	1.13	1.03-1.23	1.13	1.03-1.24
Age									
50-69 yrs (ref)	13,079								
70-79 yrs	4,544			1.06	1.02-1.10	1.02	0.98-1.05	1.03	1.00-1.07
≥80 yrs	1,911			1.09	1.03-1.14	1.02	0.97-1.07	1.04	0.99-1.09
Self-reported Gender									
F (ref)	11,014								
M	9,175			0.98	0.95-1.01	0.97	0.94-1.00	0.96	0.94-0.99
Charlson									
0 (ref)	8,953								
1	5,613					1.16	1.12-1.20	1.16	1.12-1.20
2	2,668					1.22	1.16-1.27	1.22	1.17-1.29
3	1,327					1.25	1.18-1.33	1.27	1.19-1.34
≥4	1,628					1.45	1.37-1.53	1.47	1.39-1.55
Rurality									
Non-rural (ref)	10,811								
Rural	9,378							0.79	0.76-0.81
Income Quintile									
Q1 (lowest) (ref)	3,915								
Q2	4,363							0.98	0.93-1.03
Q3	4,044							1.01	0.96-1.06
Q4	4,414							1.07	1.01-1.12
Q5	3,553							1.03	0.97-1.09
CIMD									
1 – 2 (ref)	1,726								
>2 - 3	7,889							0.85	0.81-0.90
>3 - 4	9,471							0.80	0.75-0.85
>4 - 5	1203							0.64	0.58-0.70

It was proposed that the increased likelihood of leaving the registry for people living with dementia might have been explained by the fact that this group of people have a reduced life expectancy compared to those without dementia and would, therefore, be taken off the list prematurely due to death.(20,28) However, analysis of proportion of unattached patients who died ±30 days within the study period was only marginally higher in those with dementia (3%) compared to those without dementia (0.7%). Instead, the discrepancy of time on the NaFPR might be explained by the event of relocation to LTC, since residents often receive care from the physician at the facility and are then removed from the NaFPR.(29,30) Moreover, when additional covariables were added into the analysis, much of the dementia effect was attenuated. Specifically, rurality and CIMD had the largest impact on likelihood of leaving the NaFPR. This suggests that other geographic, sociodemographic and comorbidity factors explain the majority of the initially observed dementia effect where these patients appeared to be leaving the NaFPR more quickly than those without dementia.

Our inquiry was partly motivated out of concern that people with dementia may be waiting longer for PCPs due to discrimination resulting from the complexity a dementia diagnosis introduces into health care. Previous studies have shown that some PCPs have concerns about caring for those with dementia because of additional time to provide proper care, lack of confidence in their ability to diagnose dementia, and issues about reimbursement.(13,27) Given that older people tend to require more health care, preference for healthier patients(31) could result in older adults with dementia and other comorbidities to wait longer for PCPs. The NS 'first come, first served' model for unattached patients attempts to ensure that PCPs will likely get a balance of newly assigned patients and their health conditions, and be less likely to discriminate against complex patients from the NaFPR. This is in line with the College of Physicians and Surgeons of Ontario's (CPSO's) decision in 2011 that the 'first come, first served' policy was the most appropriate method on how PCPs should accept new patients, and discouraged interviewing or screening patients. However, there is an exception to this policy whereby the PCP can refuse a patient due to lack of confidence to treat a certain condition,(32) resulting in potential discrimination. This preference for healthier patients could be occurring in NS, since some family practices require a "meet and greet" to ensure the PCP can manage the health requirements of the patient.(6)

Access challenges have disproportionally impacted vulnerable patients and those with chronic conditions.(1) Older adults diagnosed with dementia have unique needs and tend to have other comorbidities that require additional care(19) including heart disease, mood disorders, chronic obstructive pulmonary disease, and incontinence,(20,33) thus increasing their level of health-care management. PCPs play a vital role in dementia care including prevention,(34) an accurate and timely detection of diagnosis,(8,27) educating and preparing the family, collaborative health-care communication,(35) and medical referrals(36) that all aim to improve the quality of life the patient. If attachment rates were greater in Canada, the rate of early diagnosis of dementia might improve, reduce ED visits, improve chronic condition management, and possibly delay institutionalization.(26,37,38) This highlights the importance of ensuring there are enough PCPs who can meet the complex needs of this population.

Similar durations of time on the NaFPR suggest that people living with dementia are not being discriminated against when a PCP adds new patients to their practice. Still, this data proposes the question of equality versus equity when it comes to prioritizing subtypes of patients. While this analysis shows that NS residents are receiving roughly equal timed access to a new PCP despite their dementia status, is it equitable? For example, registry users with dementia and multimorbidity could be waiting just as long for attachment to a PCP as someone without any medical conditions. This method provides fairness, but long periods of unattachment could result in the decline of health in vulnerable populations, and raises the question of whether prioritization of vulnerable patients may be the best method.

Future recommendations to ensure older adults living with dementia are receiving equitable care are strategies that avoid favouring healthier patients and refusal of complex patients. This includes having a required balance in the number of health conditions within a new group of patients coming off the registry, and creating incentives for PCPs to care for patients living with dementia.(1,32) More generally, to increase the quality of life for older adults living with dementia we need to eliminate the stigma of dementia and increase medical education on the early signs of dementia, to raise awareness and understanding of the disease in order for PCPs to feel more comfortable diagnosing dementia early.(39,40) The question of whether being unattached increases the chance that a person living with dementia will require LTC placement is an interesting one worthy of further research; it may be that delaying LTC placement would be an additional benefit of priority attachment for people living with dementia. With these factors in mind, prioritization of attachment to a PCP for older adults living with dementia may be in the best interest for this patient subgroup, as may also be the case for other people living with multimorbidity.

Limitations

We were unable to assess the specific attachment outcome of individuals who left the registry since the reason for ending enrollment on the NaFPR was undifferentiated. While we can assume that the majority left the NaFPR due to attachment with a PCP, it is possible that some of these events, particularly those with dementia, were due to placement in LTC. Using different definitions for a dementia diagnosis gave slightly different numbers of people and may not have captured every individual with dementia in NS. Given the known problem of underdiagnosis of dementia, it is also likely that some people living with undiagnosed dementia were misclassified as not having dementia. However, using a more restrictive administrative health data algorithm to define dementia did not materially change our results. Lastly, due to self-enrollment model of the NaFPR, not every NS resident without a PCP was likely accounted for in this study.

CONCLUSIONS

Our analysis of the NS NaFPR demonstrated that those with dementia spend only moderately less time waiting for a PCP. Even so, equality does not ensure equity. Among those aged 50 and older living with dementia on the registry, rurality and higher deprivation as measured by the CIMD were the strongest predictors of longer wait time for attachment to a new PCP, raising the possibility that intersectionality may be compounding disadvantage. Further assessment of the impact of these important co-factors is necessary to determine best practices regarding PCP access for people living with dementia.

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CONFLICT OF INTEREST DISCLOSURES

We have read and understood the *Canadian Geriatrics Journal's* policy on disclosing conflicts of interest and declare that we have none.

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Correspondence to: Emily Gard Marshall, PhD, Primary Care Research Unit, Dalhousie Departments of Family Medicine, Dalhousie University, 1465 Brenton St., Suite 402, Halifax, NS
E-mail: Emily.Marshall@dal.ca